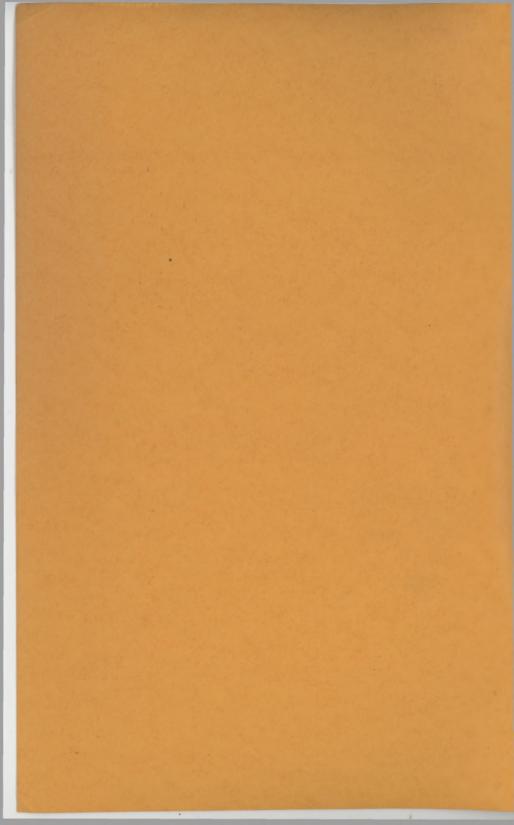


BLACKHAWK







BLACKHAWK Socket Wrenches

Quick-Detachable

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BLACKHAWK MANFACTURING CO. Milwaukee, Wis.

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This Book is a Sales Help —How to Use It

Your wrench prospect comes in either to buy a set of tools for his car or to buy a single wrench.

If it is the set he is after tell him you are showing, not a new idea, but a thoroughly tested idea—the Blackhawk idea—which has been found successful not only by car owners, but by thousands of mechanics, engineers and farmers, all of whom are known for the hard usage they give tools.

Then after asking the name of his car turn to the index on Page 5 which shows just where desired information is tabulated. There you find listed just the number and kind of Blackhawk units necessary for all the adjustments on the car your prospect owns. Turn to your stock cabinet and in less time than it takes to tell, you have before the prospect his full Blackhawk set. Many of your customers will want the set packed in a handy steel case—see page 38 for details on Carrying Cases.

Impress on the customer that these few tools take care of every adjustment on his car he need ever worry about. Then drive home these big talking points: Heat-treated sockets, heavy "racket standing" handles, sockets broached to fit easily but snugly and the all black, long wearing finish. That means a sale if he has not already said, "I'll take it".

This book provides you with a complete wrench knowledge your customers will appreciate. They like to buy all their goods at a place where the people who wait on them know what they are talking about.

Now take up the question of the man who wants just one wrench for a special purpose—and how this book can help you increase your sales. Suppose your prospect has a Buick and wants a special. Simple turn to Buick in this book. Then get the complete kit from the Blackhawk stock cabinet for the Buick. Put all except the handle and the ¾" socket to one side on the counter. While the prospect is getting out his money, tell him that for just a little more money—\$1.40 to be exact—he can secure all the sockets to handle every adjustment on his car. When you have sold him on this idea, it is only a step to selling him the complete outfit.

Use this book every time a wrench prospect comes in the door and you will be happily surprised at the profit possibilities the Blackhawk line has.

"A Set for Every Car and Job" —Sell that Idea!

Each set of wrenches made up from Blackhawk units forms a tool set for your prospect's car just as individual as though it had been made to order by the manufacturer of his car. Just enough tools to handle all the adjustments on his particular car.

And when you think about it, the Blackhawk wrench set you sell your prospect is made to order for his particular car. Blackhawk ingenuity has designed units to meet every adjustment on every car. In your Blackhawk stock cabinet you have all those units. It then becomes merely a matter of assembling the proper units for a certain make of car when your prospect is in line for a set of wrenches. In another section this book tells just how to do that.

That is the big idea to sell your prospects and the means to much larger Blackhawk profits for you. Demonstrate the fact that a Blackhawk Quick Detachable set is not a standard assortment of wrenches with detachable sockets some of which fit nothing on his car. Point out clearly that you are selling a set specially designed for the make of car your prospect owns — the result of a great deal of study and research into the adjustment requirements of every single American car.

Then tell Mr. Prospect the advantage Blackhawk wrenches have over every other wrench. Tell him about the heat-treated sockets, tougher than any nut or bolt they will ever meet—the husky, extraleverage handles—the all black, baked on, long wearing finish.

Remember, too, that from your Cabinet you can supply the farm trade with sockets, handles, or a complete set for trucks, tractors, and farm machinery. The No. 35B set shown on page 40 is ideal for all heavy duty work. The No. 43D set—see page 40—will handle every repair on car, truck, or farm machinery.

Drive home these Blackhawk features and you will find your cash register ringing much oftener.

Many Combinations In One Set

Clever designing of handles and attachments in the Blackhawk Quick Detachable Set gives your prospect a range of wrenches to take care of every adjustment he need ever worry about.

All this is the result of the many combinations possible in just one small set of Blackhawk units. First of all you have sockets to fit every nut and bolt on the car from demountable rim nuts to main bearings. Then to the socket you attach whatever handle is best suited to the job. If it's speed and you have lots of room use the brace. If it is a frozen nut use the sliding tee. No matter where the nut or bolt is, regardless of how hard to reach, a combination of Blackhawk units can handle the problem.

A Blackhawk set of units easily handles a range of work that would require a set of ordinary rigid wrenches so bulky and heavy that they would be available only in the garage and would cost many times the price of a set of Blackhawk units.

Blackhawk Socket Wrenches save your knuckles—time—temper—and do better work. The quality is of the highest, made of special steel, properly heat treated. Handles are interchangeable with all makes of sockets having ½" standard opening. Sockets are machined from solid bar steel of special analysis, accurately broached and sufficiently oversized to insure perfect fit. Special heat treatment with correct depth and thickness of wall assure greatest efficiency. Tapered to go in tight places.

All tools finished in bright black enamel baked on to stay.

All these points mean more sales. Your customer is looking for a simple set of wrenches to handle every nut and bolt. Blackhawk provides him with just that.

Buick "Master Six"

Owners Set

No. 16 —1/2" Hex. Socket	\$0.35
No. 18 — 16" Hex. Socket	.35
No. 20 —5/8" Hex. Socket	.35
No. 22 — 18" Hex. Socket	.35
No. 24 —¾" Hex. Socket	
No. T-4—Sliding Tee Handle	.75
No. T-5—Q. D. Double End Offset	.75
No. T-8—Q. D. Extension Bar	.70
No. 500 —Dem. Rim Nut Speeder	
No. 3310-Q. D. Tee Handle	1.00
	\$6.25

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON BUICK "MASTER SIX" CARS—MODEL 1927-1928

Part Name	Size across Flats on Nuts	Q.D.Wren Combin Socket	ations Weld	Wrenches led and Fixed Type Sockets
BODY PARTS Body to frame bolt	18	18	T-2 310	518-1618
BATTERY Battery bracket bolt nut	56	20	T-4	1820-1220
BRAKES Brake rod lever nut Brake cross shaft lever nut Brake band adjusting nut Brake band support nut	· · · · 18	16 18 24 18	110X 110X 110X T-5	575-1416 575-1618 1124-2422 575-1318
BUMPERS Bracket to frame bolt nut (front) Bracket to frame bolt nut (rear)	· · · · 5/8 · · · · 3/4	20 24	T-4 110 X	144-1820 4218-4424
CARBURETOR Carburetor to intake manifold riser .,	ชืด	18	110X	575-1318
CLUTCH Clutch pedal adjusting nut Clutch to flywheel cap screw Clutch plate stud nut Clutch housing to cylinder holt nut	1/2	16 19 16 18	T-5 T-5 T-5 T-5	575-1316 1119 575-1416 1618-1820
FAN Fan pulley adjusting nut Fan bracket bolt	1/2	16 18	110 X 110 X	1416-1618 1820-4218
FENDER Front fender bracket to frame bolt Front fender to frame Rear fender to body nut	3/2	16 16 16	T-5 T-5 T-5 T-2 610	
FRONT AXLE Steering knuckle spindle nut Steering knuckle arm bolt Steering arm ball stud nut Steering pitman arm nut Steering drag link plug	11/4	44 X 40 34 44 X T-1	T-4X 110X T-5 T-4X 310	3640 1003-3432
GENERATOR Generator to housing bolt	5/8	20	T-4	1820-1220
HEAD LAMPS Head lamp bracket to fender bolt Head lamp to tie rod stud nut Head lamp tie rod to fender	3/4	18 24 18	T-5 110 X T-5	575-1820 2422-4218 575-1820

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON BUICK "MASTER SIX" CARS—MODEL 1927-1928—Continued

Part Name	Size across Flats on Nuts		ches & ations We Handles	Wrenches lded and Fixed Type Sockets
MOTOR Cylinder head bolt nut Cylinder block to crank case nut Cylinder block to crank case nut Cylinder block to crank case holt Connecting rod bolt nut Oil pan nut Oil pan nut Oil pump cap screw to case Time gear cover screw Valve rocker arm adjusting nut Valve rocker shaft bracket nut Water inlet to cylinder screw Water outlet to cylinder nut Water pump clamp bolt Flywheel cap screw Exhaust manifold to heater Motor support bolt (front)	344 949 16 16 16 16 16 16 16 16 16 16 16 16 16 1	24 19 16 18 014 19 18 18 18 18 18 18 18 20 20	T-4 610 T-5 610 310 310 T-4 T-5 T-5 610 T-5 T-5 T-5 T-5 T-5 T-5 T-5 T-5	2020 J-2020 1119 3116-6116 3118-1216 1119 6116-1820 2018 2018 575-1318 575-6116 575-1618 1820-4218 575-1318
MUFFLER Muffler to bracket bolt nut		16	310	3116-575
RADIATOR Radiator to frame stud nut (side) Radiator stud nut		18 014	110X T-5	1318-1820
REAR AXLE Rear axle housing cover nut Rear axle drain plug Rear axle filler plug Differential case cap screw Differential bearing clamp nut Axle shaft nut Drive shaft nut Rear axle tie rod nut Universal to drive shaft housing bolt Universal housing bolt nut	14	18 710 024 25 19 52X 40 30 18	310 T-5 110X 110X 110X T-5 T-4X T-5 110X T-5 110X	3118-6118
RUNNING BOARDS Running hoard to support nut Running board to fender nut		014 014	T-5 T-5	
SPRINGS Front spring shackle bolt nut (front inside). Front spring shackle bolt nut (front outside). Front spring shackle bolt nut (rear upper) Front spring shackle bolt nut (rear lower) Front spring rebound clamp bolt nut Front spring clip nut Rear spring shackle bolt nut (front upper) Rear spring shackle bolt nut (front lower) Rear spring shackle bolt nut (front lower) Rear spring rebound clamp nut Rear spring clip nut Rear spring hanger bracket to frame nut Rear spring hanger to spring nut Rear spring hanger to spring nut Rear spring hanger clamp to axle nut	11/8 11/8 11/8 11/8 11/8 11/8 11/8 11/8	36 30 36 36 16 31 30 28 36 19 34 24 34 24	110 X 110 X 110 X 110 X 1-4 T-4 T-4 T-5 T-5 110 X 110 X 110 X 110 X	3640 2830-4330 3640 3640 575-1416 2830-4330 3640 1119 1003-3432 2422-4218 1003-3432 1820-2018
STARTER Starter bracket to case bolt		20	T-5	1820-144
STEERING GEAR Steering gear clamp nut Steering gear to frame bracket bolt Gas and spark throttle clamp bolt Grease plug	3/4	16 24 14 014	T-5 110X T-4 T-5	575-1416 2224-1224 475-1416
TRANSMISSION Transmission housing to block Transmission sliding gear shaft nut Transmission cover nut Trans main drive shaft bearing cover (rear) Center cross member nut	9 16 16 11 11 16 18	18 30 22 20 18	T-5 110X T-5 310 110X T-5	1820-2218 2830-4330 6122-1220 4020X 575-1820
TIRE CARRIER Carrier to frame nut (lower)	3/4	24 20	110X 500	2422-4424 5020
WHEELS Rear wheel hub nut Demountable rim nut	3/4	24 24	110X 500	2224-1124 5024

Buick "Standard Six"

Owners Set

No.	16 —½" Hex. Socket\$6	0.35
No.	18 — 16" Hex. Socket	.35
No.	20 —5/8" Hex. Socket	.35
No.	22 — 16" Hex. Socket	.35
No.	24 — 3/4" Hex. Socket	.45
No.	T-4-Sliding Tee Handle	.75
No.	T-5 -Q. D. Double End Offset	.75
No.	T-8-Q. D. Extension Bar	.70
	500 — Dem. Rim Nut Speeder	
No.	3310-Q. D. Tee Handle	1.00
	· ·	6 25

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON BUICK "STANDARD SIX" CARS—MODEL 1927-1928

Part Name	Size across Flats on Nuts		ations Weld	Wrenches ed and Fixed Type Sockets
Fart Name	74 1112	SOCKEL	Trangics 1	ype Bockets
BODY PARTS Body to frame bolt	18	18	T-2 310	518
BATTERY Battery bracket bolt to nut	5/8	20	T-5	1820-1220
BRAKES Brake rod lever nut Brake cross shaft bracket nut Brake band adjusting nut Brake hand support nut	3/4	16 18 24 18	T-5 T-5 T-5 T-5	475-1316 575-1618 1124-2422 575-1618
BUMPERS Bumper bracket to frame bolt nut (front)	5/8	18 20 24	T-5 T-5 T-5	575-2218 1820-144 2422-4218
CARBURETOR Carburetor to intake manifold riser bolt	· · · · · · · · · · · · · · · · · · ·	18	T-5	575-1318
CLUTCH Clutch pedal adjusting nut	1/2	16 16	T-5 T-5	575-1416 575-1316
FAN Fan pulley adjusting nut Fan bracket bolt nut	1/2	16 18	T-5 T-5	575-1416 1318
FENDERS Front fender bracket to frame Front fender to frame Rear fender to body nut	3/2	16 16 16	T-5 T-5 T-5 T2 610	575-1618 575-1618 575-1416
FRONT AXLE Steering knuckle spindle nut Steering knuckle arm bolt nut Steering arm ball stud nut Steering draglink plug Steering pitman arm nut	1 ½ 1 ½	34 34 28 T-1 44 X	T-5 T-5 T-5 310 T-4X	1003-3432 1003-3432 2830-4330
GENERATOR Generator to housing bolt	5/8	20	T-4	1120-1820
HORN Horn bracket nuts	· · · · · · · · · · · · · · · · · · ·	14	T-5	475-1416
HEAD LAMP Mead lamp bracket to fender nut Head lamp to bracket stud nut Head lamp tie rod to fender bolt	3/4	18 24 18	T-5 T-5 T-5	575-1820 2422-4218 575-1820

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON BUICK "STANDARD SIX" CARS—MODEL 1927-1928—Continued

Part Name	Size across Flats on Nuts		nches & lations We Handles	Wrenches elded and Fixed Type Sockets
MOTOR Cylinder head bolts Connecting rod bolt nut Main bearing stud nut Main bearing stud nut (rear) Oil pump to case cap screw Valve rocker arm adjusting nut Valve rocker shaft bracket nut Timer gear cover bolts Water outlet to cylinder bolt Water pump clamp bolt Intake manifold to cyl. nut (Special see dwg.) Exhaust manifold to cyl. nut (Special see dwg.) Flywheel cap screw Exhaust manifold to keater (Spec. see dwg.) Motor support bolt nut (rear) Motor support bolt nut (front) Cam shaft gear nut	78 	20 18 24 28 19 18 16 18 16 18 18 18	T-5 610 T-5 T-5 T-5 T-5 T-5 T-5 T-5 T-5 T-5 T-5	3020J-2020 X 1118-1216 2224-1124 2224-2830 1119 575-2018 575-1820 1416-6116 575-1118 1318 1318 1318 1318 1318 2220-1220 575-1820 3640
MUFFLER Muffler to bracket bolt nut	1/2	16	T-5	575-1416
RADIATOR Radiator to frame stud nut (side) Radiator lower stud nut	1 ⁹ 6	18 14	T-5 T-5	1318 1416
REAR AXLE Rear axle housing cover bolt Rear axle housing drain plug Rear axle housing filler plug Differential case cap screw Differential clamp nut Drive shaft nut Axle shaft nut Universal to drive shaft housing bolt Universal to transmission housing nut	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18 710 024 24 22 34 46X 18	T-5 T-5 T-5 110X T-4 T-5 T-4X T'-5	3118-6116
RUNNING BOARD Running board to support nut Running board to fender		014 014	T-5 T-5	********
SPRINGS Front spring shackle bolt nut (Front, inside) Front spring shackle bolt nut (Front, outside) Front spring shackle bolt nut (Rear, inside up Front spring shackle bolt nut (Rear, inside up Front spring rebound clamp nut Front spring clip nut Rear spring shackle bolt and nut (front) Rear spring shackle bolt and nut (rear) Rear spring rebound clamp nut Rear spring langer by acket to spring nut Rear spring hanger to spring nut Rear spring hanger clamp to axle nut	per) 1 wer) 78 1/2 18 1/4 1/4	32 28 32 28 16 31 30 38 X 19 31 30 30 20	T-5 T-5 T-5 T-5 T-5 T-5 T-5 T-5 T-5 T-5X T-5 T-5 T-5	3432 2830-4330 3432 2830-4330 475-1416 2830-4330 1119 2830-4330 2830-4330 1120-1820
STARTER Starter bracket to motor bolt	5/8	20	T-5	1820
STEERING GEAR Steering gear clamp nut Steering gear to frame bracket bolt Gas and spark throttle clamp bolt Steering gear grease plug	3/4 376	16 24 14 014	T-5 T-5 T-4 T-5	575-1416 2422-4218 475-1416
TRANSMISSION Transmission housing to block nut Transmission cover bolt Center cross member support nut	1/4	18 22 18	T-5 T-5 T-5	1820 ⁻ 1220 575-1820
WHEELS Rear wheel hub nut		22 24	T-5 500	1220 5024-5224
TIRE CARRIER Tire carrier to frame nut (lower) Tire carrier to frame arm nut	5/8	24 20	T-5 T-5	2422-4424 1820-4424

Cadillac

Owners Set

			\$7.60
	*		
No:	3310—Q. D. Tee Handle		. 1.00
No.	500 —Dem. Rim Nut Speeder	 	. 1.20
	T-8—Q. D. Extension Bar		
No.	T-5-Q. D. Double End Offset	 	75
No.	T-4 Sliding Tee Handle	 	75
	32 —1" Hex. Socket		
	25 — 3½" Hex. Socket		
	25" Herr Control	 	70
No.			
No.			
No.			
No.	19 — 19 Hex. Socket	 	35
No.	18 $-\frac{9}{16}$ " Hex. Socket	 	35
No.	16 1/2" Hex. Socket	 ,	.\$0.35

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CADILLAC CARS MODEL 1927-1928

	Flats on	Combin		ded and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
BODY PARTS				
Body to frame bolt nut		25 16	T-2 310 T-5	575-1416
BATTERY	.,	16	T-5	575-3116
Battery box to frame bolt	½	16 16	T-5	575-1416
BRAKES	9	18	T-5	575-1618
Brake cross arm bracket to frame nut	16	19	110X	1119
Rear brake band support bolt	33	025	T-5	
Front brake lock stop cap screw	9	18	T`-5	1618-1318
BUMPERS				
Front bumper bracket to frame screw	5/8	20	T-5	1820-144
Rear bumper bracket to frame screw	5/8	20	T-5	1820-144
CARBURETOR	.0.	18	T-5	575-1618
Carburetor to manifold bolt	16	10	1 3	0.0 .0-0
CLUTCH	1	32	110X	3432
Clutch connection bolt		18	T-5	1618-4424
Clutch lever bolt			****	
Clutch housing to flywheel cap screw	1/2	16	T-5	2214-1214
FAN			(11 /37	
Fan stud nut	1 ½	48X	T-4X	
FRONT FENDERS	-/	16	T-5	575-6116
Front fender to shield	1/2	16	T-5 210	2116-575
Front fender to run board bolt nut Front fender bracket to frame bolt nut	72	18	T-5	575-4218
Rear fender to run board bolt nut	1/2	16	T-5 210	2116-575
Rear fender to body cap screw	1/2	16	T-5 T-2 61	0 616-575
FRONT AXLE				
Steering knuckle lever nut		46X	T-4X	
Steering knuckle spindle nut		52X 18	T-4X T-5	1618-575
Steering tie rod clevis bolt nut		24	T-5	4218-4424
Steering knuckle arm hall nut	19	30	110X	2830-4330
Drag link plug		T-1X	310	
GASOLINE TANK				
Gasoline tank drain plug		18	T-5	575-1618
Gasoline tank support stud nut	5/8	20	T-5 310	3120-1820
GENERATOR	-/	20	Tr f	1920 1219
Generator support bolt	98	20	T-5	1820-1218
HEAD LAMP Head lamp bracket to fender bolt	8.0	20	T-5	1424-1820
Rear fender tail lamp bracket to fender bolt n		16	T-5	575-1416
The state of the s	. , /2			

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CADILLAC CARS MODEL 1927-1928—Continued

	Size across Flats on	Combin	nations We	Wrenches ided and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
MOTOR Connecting rod stud nut Cylinder head stud nut Exhaust manifold to cylinder block stud nut Exhaust manifold to pipe bolt and nut	16	18 22 18 18	T-5 T-5 610 T-5 610 T-5	3118-2216 6122-2220 6118-1218 575-1618
Motor support bolt and nut (front) Oil pan to crank case stud nut Oil pan drain plug	18 18	18 30 16 32 18	T-5 T-5 310 610 T-5 210 T-5 610	6118-2220 2830-4330 3116-6116 3432 6118-3118
Timing gear cover bolt and nut Distributor housing stud nut Water inlet to cylinder connection Water pump to cylinder cap screw Water pump inlet to pump bolt Center cross member support	16	16 18 20 18	T-5 T-2 T-5	575-1316 518-1318 1318 475-1618
MUFFLER	1/2	24 16	110X T-5	4424-2422 575-1416
Muffler bracket to frame bolt nut	1/2	18 16	T-5 T-4	575-1218 575-1416
Radiator to frame stud nut Radiator apron to frame bolt and nut Radiator support rod bolt nut	1/2	28 16 18	T-5 T-4 T-5	2224-2830 475-1416 575-1618
REAR AXLE Rear axle housing cover screw (front) Rear axle housing cover screw (rear) Rear axle drain plug	5/8	20 20 714	T-5 610 T-5 610 T-5	2218-6120 2218-6120
Universal housing nut to rear axle Torque rod nut (front) Filler plug Universal housing to transmission nut	3/	24 40 34	110X 110X 110X	2224-4218 3640 1003-3432
Universal housing to transmission nut Universal housing to drive shaft housing nut RUNNING BOARD	16	18 18	T-5 T-5	575-1316 575-1316
Running board to shield bolt nut	1/2	16 16	T-5 T-5 210	575-1416 3116-575
Front spring clamp bolt nut. (front) Front spring shackle bolt nut (front) Front spring shackle clamp cap screw Rear spring clamp bolt nut Rear spring clip nut Rear spring shackle bolt nut (front and rear).	1 1/8 5/8	16 36 20 16 30 36	T-5 T-5 T-5 T-5 T-5 T-5	475-1316 3640 1820-1120 475-1316 2830-4330 3640
STARTER				00.0
Starter housing to cap screw		20 30	T-5 T-5	1218-2220 2830-4330
STEERING GEAR Steering gear bracket to frame bolt nut	3/4	24 16	Т-4 Т-4	1124-4218
Steering gear housing cover bolt nut Steering post bracket to cowl bolt nut TRANSMISSION	5/8	20	T-5 310	575-1416 3120-1220
Transmission adjusting cover screw	½	14 16 20 18	T-5 T-5 T-5 T-5	475-1416 575-2110 2218-4424 575-1318
Transmission to case to air pump Transmission drain nut Transmission filler plug TIRE CARRIER	11/2	18 48X 714	T-5 T-4X T-5	575-1618
Tire carrier side bracket to frame nut Tire carrier lower bracket to frame nut WHEELS	34	30 24	T-5 T-5	2830-4330 2224-4424
Front wheel hub bolt nut Rear wheel hub bolt nut Demountable rim bolt nut	11	22 22 24	310 310 500	3122-1220 3122-1220 5024

Chandler "Royal & Big Six"

Owners Set

No. 16 —1/2" Hex. Socket	 \$0.35
No. 18 $-\frac{9}{16}$ Hex. Socket	 35
No. 20 —5/8" Hex. Socket	 35
No. 24 — 3/4" Hex. Socket	 45
No. 25 — 35" Hex. Socket	
No. 28 —7/8" Hex. Socket	 45
No. T-5-Q. D. Double End Offset	 75
No. T-8-Q. D. Extension Bar	 70
No. 500 -Dem. Rim Nut Speeder	1.20
No. 3310-Q. D. Tee Handle	 1.00
	\$6.05

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHANDLER "ROYAL & BIG SIX" CARS-MODEL 1927-1928

& BIG SIX CARS	-11100000			
Part Name	Size across Flats on Nuts		ations Weld	Wrenches ded and Fixed Type Sockets
BODY PARTS Sody to frame bolt nut	7/8	28	T-2 310	528-2224
BATTERY Battery box clamp nut	176	14	Т-5	1416-475
BRAKES Front and rear brake adjusting nut	nut ½ w ½	24 24 16 16 24	110X T-5 T-4 T-4 110X	2422-4424 2422-4424 575-1618 575-1618 1124-2422
BUMPERS Front bumper bracket to frame nut Front bumper to bracket nut Rear bumper bracket to frame nut Rear bumper to bracket nut	· · · · 3/4	24 28 24 28	110 X 110 X 110 X 110 X	1124-2422 2830-4330 1124-2422 2830-4330
CARBURETOR Carburetor to manifold cap screw	· · · 1 ⁰ 8			1316
CLUTCH Clutch housing to flywheel cap screw Clutch pedal adjusting clamp screw Clutch pedal adjusting lever bolt and nut	1/2	18 16 18	T-5 T-5 T-5	575-1618 575-1618 575-1820
FAN Fan bracket to cylinder cap screw	5/8	20	110X	1820-4424
FENDERS Front fender support to frame nut Rear fender to body screw	1/2	16 16	T-5 T-2 610	575-1416 616-575
FRONT AXLE Drag link plug Steering knuckle nut Steering knuckle arm nut Steering knuckle arm ball nut Steering tie rod plug	13/8	T-1 44 X 40 24 T-1	310 T-4X 110X 110X 310	3640 2422-4422
GASOLINE TANK Gasoline tank drain plug	3/8	012	T-5	
GENERATOR Generator to support cap screw	1/2	- 16	T-4	1416-575
HEAD LAMP Head lamp bracket to fender bolt and nut		16 28	T-5 110X	575-1618 2830-4330
MOTOR Connecting rod stud nut Cylinder head stud nut		20 25	T-5 310 T-5 610	3120-2218 6125

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHANDLER "ROYAL & BIG SX" CARS-MODEL 1927-1928-Continued

	Size across Flats on	Combir	nations We	Wrenches lded and Fixed
Part Name Urank case to cylinder holt Intake manifold to cylinder stud nut Flywheel to crank shaft bolt and nut Main bearing stud nut Motor support bolt nut Oil pump cap screw Pump bracket cap screw Timing gear cover cap screw Valve cover stud nut Water inlet to cylinder screw	16 34 48 48 48 48 44 48 48 48 48 48 48 48 48	Socket 16 18 24 24 28 24 16 18 16 16	Handles 310 610 T-4 T-5 110 X 110 X 110 X 1-4 T-5 T-5 T-5 T-5 T-5 T-5 T-5	Type Sockets 6116-3116 575-1820 2224-4218 2224-4218 2830-4330 2224-4424 575-1618 575-1820 6116-3116 3116-6116 575-1316
MUFFLER Muffler bracket to frame bolt nut		16	T-5	575-1618
REAR AXLE Differential carrier cap screw Differential bearing clamp bolt nut Drive pinion nut Axle drive shaft nut Propeller shaft coupling nut Propeller shaft housing to universal nut Rear axle drain plug Rear axle filler plug	7/8 1 1/4 1 1/4 3/4 5/8	18 28 40 40 24 18 710 716	T-5 110X 110X 110X 7-5 T-5 T-5	1820-144 3830-4330 3640 3640 2422-4424 575-1318
RUNNING BOARD Running board to support bolt nut		19	T-5	1119
SHOCK ABSORBERS Bracket to axle clamp nut	11	22	T-5	2422-4330
SPRINGS Front spring clamp bolt nut Front spring clip nut Front spring shackle bolt nut Rear spring clamp bolt nut Rear spring shackle bolt nut (front) Rear spring shackle bolt nut (rear)	7/8 7/8	16 128 28 16 34 32	T-5 110 X 110 X T-5 110 X 110 X	475-1416 2830-4330 2830-4330 475-1416 1003-3432 3432
STEERING GEAR Steering post to housing clamp bolt nut Steering gear housing clamp bracket nut Steering gear lever nut Steering post bracket to cowl clamp bolt	5/8	18 20 46 X 18	T-5 T-4 T-4X T-4	1820-2018 1820-4424 575-2018
TIRE CARRIER Tire carrier to frame nut Tire carrier lock nut	34	16 24	T-5 T-5 500	575-1416 5024-2224
TRANSMISSION Transmission case to motor cap screw Transmission cover cap screw Transmission drain plug Transmission filler plug Transmission main shaft nut Transmission oil lever plug		18 16 018 018 40 012	T-5 T-5 T-5 T-5 110X T-5	575-1820 575-1416
WHEELS Front hub bolt nut Rear hub bolt nut Demountable rim bolt nut	3.5	24 24 24	110X 110X 500	2224-4218 2224-4218 5024

Chevrolet "Four"

Owners Set

No. 16	-1/2"	Hex.	Socket		 	 	 	 	.\$0.35
No. 18	-16"	Hex.	Socket		 	 	 	 	35
No. 20									
No. 24									
No. 26									
No. 28									
No. T-5									
No. 500									
No. 3310	—Q. I	D. Te	e Hand	le .	 	 	 	 	1.00
									\$5.35

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHEVROLET "FOUR" CARS—MODEL 1928

	C.	() D W	1 0	337
Part Name	Flats on Nuts	Q.D.Wrer Combin Socket	ations Wel	Wrenches ded and Fixed Type Sockets
BODY	Nuts	SOCKEL	Handres	Type Bockets
Body to frame bolt nut	5/8	020	T-2 310	
BATTERY Battery box to bracket clamp bolt	19	19	110 X	1119
BRAKES Front brake adjusting nut Front brake adj. screw bracket to drum bolt Front brake lever shaft to frame nut Front brake bracket to axle stud nut Rear brake adjusting nut Rear and front cross shaft clamp lever screws Brake lever check bracket screw Rear brake adjusting stud	7/2 7/8 3/4 5/8 1/2	24 16 28 24 20 16 18 412	110X T-4 110X 110X T-5 T-5 T-5	575-1618 2830-4330 1124-4218 1218-1120 575-1618 575-1118
BUMPERS Front bumper bracket to frame screw Front bumper to bracket bolt nut Rear bumper bracket to frame screw Rear bumper to bracket bolt nut	5/8 3/4	24 20 24 20	911X T-5 110X T-5	1124-2422 1820-1120 1124-2422
CARBURETOR Carburetor to manifold screw ,	½	16	310	3116-575
CLUTCH Clutch band adjusting nut	3/4	24 18	110X T-5	2422 575-1618
DISTRIBUTOR Distributor lock bolt nut	1/2			1316
FAN Fan blade screw	17	14	Т-4	
FENDERS Front fender support to frame bolt nut Front fender to run board shield nut Front fender to run board bolt nut Rear fender to body screws Rear fender to shield screw Rear fender to run board bolt nut	16 16 1/2 1/2 3/8	16 014 014 16 012 014	T-5 T-4 T-4 610 T-4 T-4	575-1618 575-6116
FRONT AXLE Drag link plug Steering knuckle spindle nut Steering knuckle arm nut Steering tie rod clamp bolt nut Steering arm bracket bolts	11t	T-1 34 24 18 20	310 T-4 110X 110X T-4 T-5	1003-3432 1120-2422 575-1618 4424-1820
GASOLINE TANK Gas tank strap nuts	1/2	16	T-5 310	1316-3116
GENERATOR Generator to motor screw	12	19 16	T-5 T-4	1119 575-1618

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHEVROLET "FOUR" CARS—MODEL 1928—Continued

Part Name	Size across Flats on Nuts	Q.D.Wrene Combina Socket	ations Weld	Wrenches led and Fixed Type Sockets
HEAD LAMP Head lamp bracket to fender bolt nut Head lamp stud nut	3/4	24 24	T-5 110X	1124-2422 2422-4218
MOTOR Cam shaft nut Connecting rod bolt nut Cylinder head nut Flywheel to crank shaft screws Intake and exhaust manifold screws Main bearing bolts Motor support bolt nut (rear) Motor support bolt nut (front) Motor drain plug Rocker arm bracket screw Rocker arm adjusting nut (open hole 12 pt.) Water outlet screw Water pump screw	76 74 76 76 76 76 76	24 18 24 18 26 20 20 24 24 24 20 20	110X 310 T-6 911X T-5 110X 310 110X 911X 110X 310 T-5 110X 110X	2224-4218 3118-2218 1224-4924X 1618-4424 4118-3118 4926 4424-2422 3124-2224 4218 2220 2018 1820 1318-2018
MUFFLER Muffler to bracket screw	3/2	16	310	575-3116
RADIATOR Radiator stud nut (21" Speeder)	38	19	310	3119
REAR AXLE Differential case screws Drive shaft housing stud nut Differential carrier cap screw Rear axle filler plug Rear axle shaft nut Drive shaft bearing adjusting nut	16 16 172 172 14 14 14	18 18 16 024 34 24	110 X 610 110 X 310 T-5 110 X 110 X	1218-6118 618-1218 3116-1216 1003-3432 2422-4218
RUNNING BOARD Running board to support bolt nut		014	210	
SPRINGS Front spring bolt nut (front) Front spring bolt nut (rear) Front spring clip bolt nut Front spring clamp bolt nut Rear spring bolt nut (front) Rear spring bolt nut (rear) Rear spring bolt nut (rear) Rear spring clip nut Rear spring clamp nut	3/4	24 28 24 19 28 28 24 16	110 X 110 X 110 X 110 X T-4 110 X 110 X 110 X T-4	2422-4218 2830-4330 4218-2422 1119 2830-4330 2830-4330 4218-2422 475-1416
STARTER Starter to bracket screws Starter switch bracket bolt nut	86	::		1320 1320
STEERING GEAR Steering arm nut	½ ½	34 16 16 16 19	110 X T-4 T-4 T-4 110 X	1003-3432 475-1416 475-1416 475-1316 1119
TIRE CARRIER Tire carrier to frame bolt nut Tire carrier to frame lock nut	34	18 24	110X 500	575-1618 5024
TRANSMISSION Transmission cover screws Transmission drain plug Transmission filler plug Transmission to motor arm bolt nut Universal joint housing nut Universal support bracket nut	1/2	16 016 016 16 18	210 T-4 210 310 210 310 T-4 T-4	1316 575-1316 1618-1820
WHEELS Demountable rim bolt nut Demountable disc wheel nut		24 24	500 500	5024 5024

Chrysler "62"

Owners Set

No. 16 — 1/2" Hex. Socket	
No. 18 — 16" Hex. Socket	
No. 20 — 58" Hex. Socket	
No. 22 — 11 Hex. Socket	j
No. 24 —¾" Hex. Socket	,
No. 36 —11/8" Hex. Socket	
No. T-4—Sliding Tee Handle	,
No. T-5-Q. D. Double End Offset	
No. T-6-Q. D. Extension Bar65	
No. $500 - \tilde{Q}$. D. Brace Handle 1.20)
No. 3310—Q. D. Tee Handle 1.00)
-	

\$6.85

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHRYSLER "62" CARS-MODEL 1927-1928

	Sine naroes	O.D.Wren	ches &	Wrenches
	Flats on	Combina	tions Weld	ed and Fixed
Part Name	Nuts	Socket	Handles 1	'ype Sockets
BODY PARTS Body to frame	16	22	T-2 T-5 310	522-2422
CLUTCH				
Clutch housing to motor screw		18 18	T-5 110X T-5	1820-4218 1820-2018
Clutch pedal set screw nut		20	T-5 110X	144-1820
FENDERS				
Front fender apron and support bolt nut Front fender support bolt to frame nut		19 18	T-5 T-5	1119 575-1618
Front fender apron bolt nut	1/2	16	T-5 310	3116-575
Front fender to running board nut	52	16	T-5	575-1618
FRONT AXLE Steering knuckle arm nut	134	40	110X	3640
Steering knuckle arm ball nut	3/4	24	110 X	2422-4218
Drag link plug	11/8	T-1 T-1	T-5 310 T-5 310	
. ~	/ 4		* 5 0 * 0	
GENERATOR Generator to motor nut	16	18	T-4 T-5	575-1218
HEAD LAMP				
Head lamp bracket to fender nut	16	18	T-5	1820-4218
MOTOR	201	20		
Connecting rod stud nut (wrist pin end)		20 18	T-5 310 T-5 310	3120-1820 3118-1216
Cylinder head stud nut	3/4	* 24	T-6 500	2224-1224
Motor support bolt (rear)	3/4	24 24	110X 110X	2422-4218 2422-4218
Motor drain plug		30 16	110X T-5	3640 575-1618
Oil pan screw		16	310	3116-1216
Timing gear cover screw		18 14	T-4 T-4	1618-4424 475-1416
	116	14	1.4	4/3-1410
MUFFLER Muffler support bolt	1/2	16	T-5	575-1618
Muffler to pipe bolt	35	16	T-5	575-1618
Muffler tail pipe support bolt	1/2	16	T-5	575-1618
REAR AXLE Rear axle housing cover screw	2.	18	T-4 310	3118-6118
Rear axle drive shaft nut	1176	46X	T-4X	
Rear axle drain plug		020 40	T-4 110X	3640
RUNNING BOARD	74			
Running board to support nut	16	018	T-4 T-5	

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHRYSLER "62" CARS-MODEL 1927-1928—Continued

Part Name		Combin	ations We	Wrenches Ided and Fixed Type Sockets
SPRINGS Spring shackle bolt nut Spring clip bolt nut Spring clamp bolt nut	34	20 24 16	T-4 110X T-4	1820-4320 4424-2422 475-1618
STARTER Starter to motor screw	15	30	110X	2830-4330
STEERING GEAR Steering gear clamp bolt nut Steering gear to frame bolt nut Steering gear arm nut Steering gear worm gear adjusting screw	16	20 18 46X 18	T-5 T-4 T-5 T-4X T-5	1820-2018 575-1618 575-1618
TRANSMISSION Transmission drain plug Transmission filler plug Transmission spline shaft to spider nut Drive shaft coupling bolt	11/4	016 024 40 18	T-4 T-4 110X T-5	3640 575-1820
WHEELS Wheel hub nut Rim nut		22 24	310 T-5 500	2220-1220 5024

Chrysler "52"

Owners Set

No. 16 -	-½" Hex.	Socket			,	 	 	\$0.35
No. 18 -	-16" Hex.	Socket				 	 	.35
No. 20 -	-5/8" Hex.	Socket				 	 	.35
No. 22 -								
No. 24 -	-3/4" Hex.	Socket				 	 	.45
No. T-5	-Q. D. Do	uble En	d Off	set.		 	 	.75
No. T-6-								
No. 500 -								
No. 3310—	-Q. D. Tee	e Handl	e			 	 	1.00
							-	
								\$5.45

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHRYSLER "52" CARS-MODEL 1927-1928

Part Name	Size across Flats on Nuts		tions Weld	Wrenches led and Fixed Type Sockets
BODY PARTS Body to frame at dash	19	18 22	T-2 T-5 310 T-5 310	518-1820 522-2422
BRAKES Brake cross shaft bracket bolt Brake rod lever screw	1/2	16 18	T-5 T-5	475-1316 575-2018
BUMPERS Bumper (rear side)	1/1	18 22 34	T-5 T-5 110X	1820-4424 2422-4330 3432
CLUTCH Clutch housing to motor screw Clutch lever clamp bolt Clutch to flywheel screw Clutch driving stud nut	5/8	18 19 20 16	T-5 T-5 T-5 610 T-5 610	1820-4218 1119 6120-4424 6116-1618
FAN Fan stud nut	18	30	110X	2830-4330
FENDERS Front fender to bracket bolt . Rear fender to body screw Rear fender to body screw	16	18 14 16	T-5 T-5 610 T-5 610	575-1618 475-6114 575-6116
FRONT AXLE Steering knuckle nut Steering knuckle arm nut Steering knuckle arm ball nut Drag link plug Tie rod plug	34	36 30 24 T-1 T-1	110X 110X 110X 310 310	3640 4330-2830 4424-4118
GENERATOR Generator cradle stud nut	15 10 16	30 18	110X T-5	2830-4330 575-2018
HEAD LAMP Head lamp to clamp nut Head lamp to fender nut		28 18	110X T-5	2830-4330 575-1318
MOTOR Connecting rod cap bolt nut Piston pin clamp screw nut Cvlinder head stud nut Exhaust manifold to motor stud Flywheel holt nut Intake manifold to motor stud nut Main bearing screw (rear) Main bearing screw (center) Crank shaft rear bearing clamp holt Crank shaft rear bearing clamp bolt nut Motor support bolt (rear) Motor front support spring center bolt nut	5/8 5/8 5/8 15/8 11/6 11/6 11/6 11/6 11/4	18 18 20 18 20 18 22 30 22 24 24 24	T-5 310 T-5 310 T-6 110 X T-5 310 T-5 310 T-5 310 T-5 310 110 X 110 X 110 X 110 X 110 X	3118-1216 1218-3118 2220-1218 575-1820 4424-2220 575-1820 3122-2220 2830-4330 4330-2220 4424-4218 2422-4218 575-1618

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON CHRYSLER "52" CARS—MODEL 1927-1928—Continued

Part Name Oil pan screw Timing gear cover screw Timer bracket screw Water inlet to cylinder screw	· · · · · · · · · · · · · · · · · · ·		ations Wel	Wrenches ded and Fixed Type Sockets 3116-6116 3118-6118 1316-475 576-1618 1820-4424
Cam shaft bearing lock screw MUFFLER Muffler to support bolt Muffler to pipe bolt Muffler tail pipe support bolt	1/2	16 16 16	T-5 T-5 T-5	575-1618 475-1618 475-1316
REAR AXLE Rear axle housing cover screw Rear axle drive shaft nut Rear axle drain plug Rear axle drive pinion to spider nut	1 1/4	18 40 018 30	T-5 310 110X T-5 610 110X	3118-6118 3640 2830-4330
RUNNING BOARD Running board support nut	10	018	Т-5	
SPRINGS Front spring shackle bolt nut Front spring clip nut Rear spring shackle bolt Rear spring clip nut Spring clamp bolt	5/8 5/8	28 20 28 20 16	110X T-4 110X T-4 T-4	2830-4330 1820-144 2830-4330 1820-4424 575-1316
STEERING GEAR Steering gear bracket to frame bolt nut Steering gear support clamp bolt nut Steering gear worm gear adjusting screw Steering gear arm nut	5/8	18 18 20 40	T-4 T-5 T-5 110X	1820-4424 575-4218 1318-2018 3640
TRANSMISSION Transmission to support screw Transmission drain plug Transmission filler plug Transmission rear bearing screw Transmission spline shaft to spider nut	· · · · · ½	19 016 016 16 34	T-4 T-4 T-4 T-5 110X	1119
WHEELS Wheel hub nut Rim nut	3/4	24 20	T-5 500	2224-1224 5020

Dodge "Four"

Owners Set

No. 16 —½" Hex. Socket\$	
No. 18 — "" Hex. Socket	
No. 20 —5/8" Hex. Socket	
No. 22 — 16" Hex. Socket	.35
No. 24 —3/4" Hex. Socket	
No. 28 —7/8" Hex. Socket	.45
No. T-4—Sliding Tee Handle	.75
No. T-5—Q. D. Double End Offset	.75
No. T-8-Q. D. Extension Bar	.70
No. 500 —Dem. Rim Nut Speeder	
\$	5.70

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON DODGE "FOUR" CARS ALL MODELS 1927—1928

ALL MODE.	20 172, 17			
	Size across Flats on	Combina	tions Weld	Wrenches led and Fixed Type Sockets
Part Name BODY PARTS Body to frame nuts Body to frame nuts (rear) Dash to hody nuts	34	24 24 24	T-2 310 T-4 610 T-5	524-4424 4424-2422 4424-2422
BATTERY Battery box bracket to frame bolt and nut Battery box to bracket bolt and nut	½	16 16	T-5 T-5	4424-1116 4424-1116
BRAKES Brake band to support bracket nut	5/8	20	T-5	1120-4320
BUMPERS Bumper attachment holt		24 18	T-5 T-5	2422-4218 575-1820
CLUTCH Pedal clamp adjusting bolt	%	18	110X	1618
FAN Fan adjusting screwFan adjusting screw		20 16	T-5 T-5	4320-2220 1820
FENDERS Front fender to frame bolt and nut Front fender bracket to frame bolt and nut Rear fender to body nuts	16	16 18 16	T-5 T-5 610	1116-4320 575-2218 4116
FRONT AXLE Drag link plug Steering knuckle arm ball nut Steering knuckle arm nut Steering knuckle king bolt and nut Steering tie rod nuts	15	T-1 24 30 16 18	310 110X 110X T-5 T-5	4424-4218 4330-2830 575 575-1618
HEAD LAMP Head lamp bracket to fender nut Head lamp clamp nut	1/2	16 28	T-5 T-5	575-1416 4330-2830
MOTOR Connecting rod bolt nut Cylinder head stud nut Cylinder water inlet nut Cam shaft nut Engine shield bolt and nut Engine support bolt (front) Engine support bolt & nut (rear) Exhaust manifold to motor Flywheel to crank shaft bolt and nut Main bearing stud nut Oil pan screws Oil pump screw Thermoid joint bolts (water pump to generato	13/4 	24 22 16 56XX 14 28 30 20 24 28 16 32 14	110 X T-5 T-5 T-4XX T-4 T-5 T-5 T-5 610 T-5 T-5 310 T-5 T-5	3124-4424 6122-2220 575-1116 3114-475 4330-2830 4330-2830 6120-1220 2224-4218 4330-2830 4116-3116 3432 575-1416

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON DODGE "FOUR" CARS ALL MODELS 1927-1928—Continued

1122 1102220				
		Q.D.Wre	nches &	Wrenches
	Flats on		Handles	ded and Fixed Type Sockets
Part Name	Nuts	Socket		
Timing gear cover screws		16 14	T-4 610 T-5	6116-4424 575-2214
Water pump gear cover screw	16	18	610	4118-3118
Water pump gear housing screw	16	18	T-5	1118-1820
Water pump to motor screw Propeller shaft universal nut	9.	18	T-5	1118-1618
Propeller shall universal nut	16	-0		
MUFFLER				
Muffler bracket bolt and nut (to frame)	1/2	16	T-5	575
· ·				
RADIATOR	2/	24	T'-5	1224
Radiator stud nuts		14	T-5	575
Radiator shell to core nut	16	14	1-5	575
REAR AXLE				
Axle drive shaft nut	1 1/4	40	T-5 110X	3640
Differential carrier cap stud nut	7/8	28	T-5	2830-2224
Differential carrier clamp bolt	3/8	28	T-5	1128-2830
Differential carrier bolt nut	1	32	T-5	3432
Differential carrier housing bolt		20 18	T-5 T-5 610	2218 4118-4424
Differential case screws	Is	18	T-5 610	4118-144
Propeller shaft hearing retainer screw	16	18	T-5	575
Propeller shaft hearing retainer screw Propeller shaft drive pinion nut	1 1/4	40	T-5 110X	4118-4424
Rear axle drain plug	1'd SQ.	014	T-5 210	
Rear axle housing cover screws	1/2	16	310 610	4116-3116
Motor drain plug	1 1/8	36	210	3640
RUNNING BOARD	1/	16	T-5 210	2116
Running board to support nut		10	1-5 210	2110
SPRINGS				
Front spring bolt nut	15	30	110X	2830-4330
Front spring clip nut	3/4	24	911X	1124-2422
Rear spring bolt nut (front)	1 16	34	110X	3432
Rear spring holt nut (rear)	· · · · · · · · · · · · · · · · · · ·	30	110X	2830-4330 2830-4330
Rear spring clip nut	/8	28 16	911X T-4	575-1618
Rebound clamp nuts		10	1.4	2/2-1010
STARTER GENERATOR				
Starter generator adjusting bracket nut	Pe	18	T-4	575-1820
Starter generator clamp to motor screw	16	18	T-5	575-1820
COMPRESSION COLOR				
STEERING GEAR	34	16	T-5	575-1316
Steering gear case clamp bolt	5/6	20	T-5	1820-144
Steeling gent case macket clamp note	78	20		10.20
TIRE CARRIER				
Tire carrier attachment bolt		16	T-5	575-1618
Spare tire lock nut	· · · · · 5/8	20	500	5020
TRANSMISSION				
Transmission filler plug (special inside)	1/2	716	T-4 210	
Transmission filler plug (special inside) Transmission case to block bolt and nut .		18	T-5	1218-2218
Transmission case cover screws	1/2	16	T-5 310	3116-6116
Transmission case drain plug	10	018	T-4 210	
Transmission main shaft nut	1 1/4	40	T-5 110X	3640
Transmission brake adjusting screw Transmission to clutch housing screw	3/8	28 28	T-5 T-5	2224-2830 1224-2224
Universal housing to transmission case bolt.		28 24	T-5	1224-2224
Universal joint housing bolt		24	T-5	2224-2422
	/9			
WHEELS (WOOD)				
Hub bolt nuts		22	T-5	1220-2220
Rim bolt nuts	5/8	20	500	5020

Essex "Super Six"

Owners Set

No. 16 — 1/2" Hex. Socket	
No. 18 — 16" Hex. Socket	
No. 19 — 32" Hex. Socket	
No. 20 — 5/8" Hex. Socket	
No. 24 —¾" Hex. Socket	
No. 28 —7/8" Hex. Socket	
No. T-4—Sliding Tee Handle	75
No. T-5—Q. D. Double End Offset	
No. T-8-Q. D. Extension Bar	
No. 500 —Dem. Rim Nut Speeder	. 1.20
	\$5.70

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON ESSEX "SUPER SIX" CARS—MODEL 1927-1928

CARS—MOD	EL 1927-1	928		
Part Name	Size across Flats on Nuts	Combin	ations Weld	Wrenches led and Fixed Type Sockets
BODY PARTS Body to frame bolt		24	310 T-2	524-2224
RATTERY Battery to frame bolt and nut	i'e	18	T-5	575-1618
BRAKES Brake band adjusting stud nut Brake band support bracket screw		24 18	T-5 T-5	4218-2422 575-1618
BUMPERS Bumper bracket to frame bolt		18 20	110X 110X	575-1618 1820-144
CARBURETOR Carburetor to cylinder screw	Te	14	T-5 610	6114-475
CLUTCH Clutch housing to cylinder bolt		24 28	110X 110X	2224-4218 4330-2830
FAN Fan adjusting nut	5%	20	Т-5	1820-144
FENDERS Front fender bracket to frame bolt nut Front fender to bracket nut Rear fender to body bolt	76	16 18 16	T-5 T-4 T-5 T-2 610	475-1416 575-1618 6116-575
FRONT AXLE Steering knuckle spindle nut Steering knuckle spindle arm nut Steering tie rod yoke clamp bolt Steering arm ball nut Steering drag link plug	18 5/8	30 30 20 24 T-1	110 X 911 X T-4 T-5 310	2830-4330 2830-4330 1820-144 1124-2422
GASOLINE TANK Gas tank support strap bolt nut	1/2	16	T-5	575-1216
HEAD LAMP Head lamp bracket to fender nut Head lamp stud nut Head lamp tie rod to fender nut	74	18 28 18	T-4 110X T-4	575-1618 2830-4330 575-1618
MOTOR Connecting rod stud nut Cylinder head stud nut Cylinder to crank case bolt Exhaust manifold stud nut Flywheel crank shaft balance bolt nuts Flywheel to crank shaft bolt Flywheel guard screw Intake manifold stud nut Main bearing stud nut	1988 1972 1981 1981 1981 1981 1981 1981 1981 198	18 19 16 19 20 18 16 19 24	T-5 T-5 310 T-5 110X 110X 110X T-5 T-5	1218-2218 1119 3116-6116 1119 1820-4424 2218-4218 475-1416 1119 2224-4218

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON ESSEX "SUPER SIX" CARS—MODEL 1927-1928—Continued

	Size across Flats on	Q.D.Wres		Wrenches led and Fixed
Part Name	Nuts	Socket	Handles '	Type Sockets
Motor support to frame bolt & nut (rear) Motor support to frame bolt & nut (front)	3/4	24 24	T-5 T-5	2224-4218 2224-4218
Motor drain plug	1/2	014 16 16	T-5 110X 610 T-5	575-6116 575-1416
Timer case to motor screw Water inlet to motor screw Water outlet to motor screw	16	18 16	T-5 610 T-5 610	575-1118 6116-575
MUFFLER Muffler support bolt		16	310	575-1416
	/2	20	510	
RADIATOR Radiator stud nut	19	19	T-5	1119-3119
REAR AXLE Differential carrier screw		18	110X	2216
Rear axle drain plug	16	018 18	210 T-5 610	6116
Rear axle shaft nut	18	30	110X	2830-4330
RUNNING BOARD Running board to support nut	½	16	T-15 210	575-2116
SPRINGS Front spring clip nut	3/4	24	110X	4218
Front spring shackle bolt nut	} §	30 24	T-4 110X	2830-4330 4218
Rear spring shackle bolt nut	18	30 16	T-4 T-5	2830-4330 475-1416
STARTER Starter to motor screws	18	18	T-5	1218-575
STEERING GEAR				
Steering arm lever nut	· · · · · · · · · · · · · · · · · · ·	30 16	110X T-5	2830-4330 475-1416
Steering gear case support screw Steering gear case support to frame nut	18	18 20	T-4 T-5	575-1618 1820-2218
Steering post bracket clamp bolt	1/2	16 18	T-4 T-4	575-1618 575-1318
TIRE CARRIER Tire carrier bracket to frame nut	2	18	T-5	575-1820
Tire carrier lock nut		24	500	5024
TRANSMISSION Pedal bracket to transmission case screw	.9,	18	T-5	575-1820
Transmission cover screw	1/2	16 28	T-5 610	1216-6116 2830-4330
Transmission drain plug	1/2	16 16	T-5 T-5	2116 1316-575
WHEELS Hub bolt nuts	11	22	Т-5	2220
Demountable rim nut		24	500	5024

Ford Model "A"

Owners Set

No. 16	—½" Hex. Socket\$	0.35
	—16" Hex. Socket	
No. 20	—5/8" Hex. Socket	.35
	— le" Hex. Socket	
No. 24	—¾" Hex. Socket	.45
No. 28	7/8" Hex. Socket	.45
	-Extension Bar	
No. T-	-Sliding Tee Handle	./5
	—Q. D. Double End Offset	
No. 500	—Dem. Rim Nut Speeder	1.20
	\$	5.65

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON FORD MODEL "A" CARS—MODEL 1927-1928

CARS—MODE	EL 1927-1	928		
	Size across Flats on	Combina	tions Weld	Wrenches led and Fixed
Part Name	Nuts	Socket	Handles T	Type Sockets
BODY PARTS Body to frame bolt nut (center and rear) Cowl bracket to frame bolt nut	16	22 18	T-5 T-2 310 310	2422-522 3118-4118
BATTERY Battery clamp nuts	5/8	20	310	3120-4120
BUMPERS Front bumper to bracket nut Front bumper to frame bolt nut Rear bumper to frame bolt nut Rear bumper to bracket nut Rear bumper to frame bolt nut	5/8 7/8	28 24 20 28 18	T-5 T-5 T-5 T-5 T-5	2830 2422 1820-4424 2830 1420-4424
CARBURETOR Carburetor lock screw (below cowl) Carburetor to exhaust manifold screw	· · · · · · · · · · · · · · · · · · ·	16 16	T-4 T-5	1416-575 1416
DISTRIBUTOR Distributor lock screw nut	9	18	110X	575
BRAKES Brake adjusting stud (square)	176	014	911X-110X	4014
CLUTCH Clutch assembly stud nut	1 1/4	16 40	610 T-6 110 X	4116-3116 3640
FAN Fan shaft nut Fan belt adjusting nut	16	20 18	T-4 T-4	1820-1218 1820-1218
FENDERS Front fender support to frame bolt Front fender support to frame holt nut Front fender to apron bolt nut Front fender support to frame bolt nut Front fender support to frame bolt nut Front fender to running board Rear fender to running board Rear fender to body screw	110 1/2 1/2 1/2 1/2	20 22 16 18 16 16	T-5 T-5 110X T-5 911X 911X T-5	1820-2220 2422-1820 575-1316 575-144 1116-1618 1116-1618 6116-575
FRONT AXLE Steering knuckle nut Steering knuckle arm nut Steering tie rod clamp hoit nut Steering tie rod end plug Steering drag link plug	7/8	36 25 18 T-1 T-1	T-5 T-5 T-4 T-4 310	3640 2830-2224 575-1618
GASOLINE TANK Gas tank and cowl bolt and nut GENERATOR	1/2	16	911X	575-1416
Generator to motor bracket bolt	5%	20 20 18	T-5 T-5 T-5	1820-4418X 1820-4418X 4418X
HOUDAILLE SHOCK ABSORBERS Houdaille clamp to axle bolt nut Houdaille arm adjusting nut	36	28 24	T-5 T-5	4330-2224 4218-2224

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON FORD MODEL "A" CARS MODEL 1927-1928—Continued

	G:		O D W	L P.	Wrenches
		e across lats on	Q.D.Wrei Combin	ations Wel	ded and Fixed
Part Name		Nuts	Socket		Type Sockets
HEAD LAMP					
Head lamp stud nut (right hand only)		. 3/4	24 22	T-5 T-5	2422-4218 2422-4330
Head lamp tie rod to fender bracket bolt	nut	. 19	22	1.2	2422-4330
MOTOR		5./	20	310 110 X	3120-1120
Connecting rod stud nut Exhaust manifold to cylinder stud nut		2.4	22	T-5	6122-2422
Exhaust manifold to pine holt nut		. 16	18	T-5	6118-1618
Flywheel to crank shaft stud nut		. 3/4	24	T-6 110X	3124-2224
Exhaust manifold to pipe bolt nut Exhaust manifold to pipe bolt nut Flywheel to crank shaft stud nut Intake manifold to cylinder stud nut Main bearing bolt head Main bearing bolt nut Contra region bearing bolt nut		. 11	22	T-5	6122-2422
Main bearing bolt head		18	018 24	T-5 T-5 310	4018-3018 4124-4024
Center main bearing bolt nut (nut in oil c	hamber)	. 3/4	D24	110X	4024-4124
Motor bracket to frame nut		, 3/1	24	T'-5	6124-4218
Motor drain cap Motor support screw (front) Mot. sup. scw. (rear) (frame brkt. must		. 1 1/8	36	T-5	3640-4236
Motor support screw (front)		• 44	24 24	110X 110X	2224-1224
Oil crank case to cylinder screws	remove)	1/2	16	310	4316-3116
		7	14	210	2114-4114
Oil overflow pipe screw		. 1/2	16	T-5	6116-575
Timing gear cover screw		· 16	18 22	T-5 T-5	6118-3118 6122-2220
Valve cover screw		· 16	16	T-5	6116-575
Water inlet to cylinder screws		. 5/8	20	T-5	6120-2220
Oil overflow pipe screw Timing gear cover screw Cylinder head stud nuts Valve cover screw Water inlet to cylinder screws Water outlet to cylinder screws		. 16	22	T-5	6120-2220
Starting crank nut Universal ball cap to transmission housing		. 13/g	44 X 20	T-4 X T-5	4020X-1120
Universal ball cap clamp bolt nut	ng screw	. 18	18	T-5	2118-1118
Chryslan ban cap clamp box hat		. 10	- 0		
MUFFLER		.,	16	210	2116 1214
Muffler support bolt and nut		. 1/2	16	310	3116-1214
RUNNING BOARD					
Running board to support bolt		. 5/8	020	210	2120-1220
RADIATOR					
Radiator to frame bolt nut		. 18	18	6310	6318
REAR AXLE					
Drive shaft pinion nut		. 15	30	T-5	2830-4330
Rear axle housing to differential screws		16 15 16	18 30	T-5 T-5	575-1416 4330
Rear axle shall hut		16 7 16	714	210	4550
Rear axle drain plug		76	714	210	
Differential case bolt nut		16	18	T-5	4118-4424
Drive shaft pinion nut Rear axle housing to differential screws. Rear axle shaft nut Rear axle filer plug Rear axle drain plug Differential case holt nut Differential gear to differential case bolt nut	ш	16	14	T-5	1416
RADIUS ROD					
Front radius rod to motor stud nut			28	T-5	2830-4330
Rear radius rod stud nut		. 7/8	28	T'-5	2830-4330
SPRINGS					
Front spring clip nut		34	24	T-5	4218-2422
Front spring perch nut		- 10	30	T-5	4330
Front spring shackle nut		11	22 28	T-5 T-5	2422-4330 2224-4330
Front spring clip but Front spring perch nut Front spring shackle nut Rear spring clip but Rear spring shackle nut		7/8	22	T-5	2422-4330
STARTER					
Starter to motor screw		2	18	T-10 110X	1218
		10			
STEERING GEAR Steering gear arm clamp bolt nut		56	20	T-5	1820-1120
Steering gear cover screw		70	14	T.4	475-1416
Steering gear cover screw		58	20	T-5	1820-144
Steering gear adjusting lock nut		14	24 30	T-4	1124-2422
Steering wheel nut		10	30	T-5	4320-4230
TRANSMISSION					
Transmission cover screw		1/2	16	T-5	4316-575
Transmission drain plug		9 16	18 018	911X 310 .	1820-4424
Transmission filler plug		16	018	310	
Transmission cover screw Transmission to cylinder screws Transmission drain plug Transmission filler plug Universal ball cap bolt and nut		9 16	18		1318-2018
WHEELS					
Wire wheel stud nut		1.1	22	500	5022-5204
		10			2022 J207

Ford Model "T"

Owners Set

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON FORD MODEL "T" CARS

MODEL	1 011110			
	Cina namona	Q.D.Wrei	whee R	Wrenches
	Size across	Q.D. WIEL	ICHES OF	44 I CHETTES
	Flats on	Combin	ations Wel	ded and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
I dit Ivanic	1400	Doorect	22411414	- J E
BODY PARTS				
		0.10	T-4	4219X
Body bracket connecting bolt	** sq.	018		
Body bracket connecting bolt	1/2	22	T-4	4330-2422
Dash bracket-to-dash bolt nut	1/2	16	T-4	4116-4320
		18	T-4	4218-1820
Dash-to-body bolt nut	16	18	1 -4	4410-1040
BATTERY			_	
Battery bracket bolt and nut		18	T-4	4218-1820
Battery clamp bolt nut	 	22	T-4	4330-2422
Dattery clamp bott nat	16		- '	
DDAVEC				
BRAKES		0.0	785 A	4120 1422
Brake shoe support bolt	tt	22	T-4	4330-2422
Brake shoe support bolt nut	3/4	24	T-4	4218-2422
Diane and any				
CARBURETOR				
	.0.	18	T-4	4418X-1318
Carburetor flange bolt and nut	16	70	T - 1	111022 1010
COMMUTATOR				
COMMUTATOR		4.0	TD 4	4010 1000
Commutator case support bolt (without starter) 18	18	T-4	4218-1820
Commutator case support bolt (starter type) .	5/8	20	T-4	4320-1820
Commutator contact point put	_7_			104-475
Commutator contact point nut	16	2.4	T-4	
Commutator contact point nut	3/4	24	1-4	4218-2422
ENGINE				
Cam shaft bearing set screw	9	18	T-4	4218-1820
Com shaft leals must	016	438X	2000	438X
Cam shaft lock nut	Uvai		W # 040	
Connecting rod bolt nut	5/8	T-20	T-5 310	3120-1218
Crank case bolt and nut	3.	18	610 310	3118-1218
Cuarle case bott told and nut	9	18	T-4	4218-1820
Crank case arm bolt and nut	16		T-4	
Crank case front hearing screw	3/8	20		3120-6120
Crank case front bearing and spring clip nut	3/4	24	T-4	4218-2422
Crank case lower cover screw	1/2	16	T-5 310	3116-1214
Clark case lower cover serew	1.6	30	T-4	4330-2830
Crank case oil drain plug	18			
Crank shaft main bearing bolt	16 Sq.	018	T-4	4219X
Crank shaft hearing nut	3/4	24	T-4	4218-2422
Crank shaft main bearing bolt Crank shaft bearing nut Cylinder cover and crank case bolt and nut	9.	18	T-4	3118-2018
Cylinder cover and crank case boil and nut	16			
Cylinder front cover bolt and nut	10	18	T-4	4218-1820
Cylinder front cover cap screws	76	18	T-4	4218-1820
Cylinder front cover cap screw (starter type)	56	20	T-4	4320-1820
Cylinder front cover cap serew (starter type)	78			4320-3120
Cylinder head cap screws	5/8	20	500 T-10	
Cylinder valve cover stud nut	· · · · YA	18	T-4	4218-6118
Cylinder head cap screws	5/8	20	T-4 110X	4320-1820
Engine base bolts and nuts	9	18	T-4 T-10	6118-3118
Engine base poits and nots	1	10	1.4 1.10	
Flywheel cap screws Inlet and exhaust clamp stud nut Piston pin clamp screw Valve grinder (long) Valve grinder (short)	1 16	+ =		4422
Inlet and exhaust clamp stud nut		18	T-4 310	4218-6118
Picton pin clamp corew	30	* *	****	4219X
17 1 '1 (f)	16			
valve grinder (long)		4.4	****	4002
Valve grinder (short)			****	4003
FAN				
				1010 0110
Fan adjusting screw		18	310 T-4	4218-3118
Fan bracket bolt	3/4	24	T-4	4218-2422
Fan shaft nut		22	T-4	4330-2422
Tan Shart litt	IG	22	7 -4	1000-2722
FENDERS				
	7.1	0.0	773 4	4110 0004
Fender eye bolt nuts	· · · · 18	22	T-4	4330-2224
Front fender apron to frame bolt nut	1/2	16	T-4	4320-1416
Front fender iron bolt and nuts	Q.	18	T-4	4218-3118
Penn fender iron holt nest	9			
Rear fender iron bolt nut	16	18	T-4	4218-1820
EDONT AVIE				
FRONT AXLE				
Adjusting cone (right and left)	Oval	451	22.2	5504-450
Ball socket bolt and nut	2	18	T-4	4218-1820
Adjusting cone (right and left) Ball socket bolt and nut Radius rod ball cap stud nut	.0.	18	T-4 T-10	3118-1218
Co.'s Il	16			
Spindle arm nut	7/8	28	T-4	4330-2830
Spindle bolt nut	34	24	911X	4218-2224
Cain Jla hala mish ailan	11	22	110X	4330-2422
Spindle connecting rod holt nut	16	22	T-4	4330-2422
Spindle bolt with older Spindle connecting rod bolt nut	18			
Spingle connecting rod boit with other	· · · · • • • • • • • • • • • • • • • •	22	T-4	4330-2422
Spindle nut (right and left)	1 1/9	451		5504
	- / 0		1000	
GASOLINE TANK				
	54			2018
Feed pipe pack nut	48	T 16	210	
Gas tank support to clamp bolt	1/2	T-16	310	1316-1618

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON FORD MODEL "T" CARS—Continued

11.0022	011110			
Part Name	Size across Flats on Nuts	Q.D.Wren Combin Socket	nches & ations Weld Handles	Wrenches led and Fixed Type Sockets
HEAD LAMP				
Head lamp post nut	34	24	T-4 911X	4218-2422
MAGNETO	0	10	T-4	4218-1820
Magnet cap screw	16	18	1416	1416
MISCELLANEOUS	W	16	T-4	4320-475
Horn holt nuts	1/4	16	Ť-4	4320-1416
Horn bolt nuts Spark plug—Champion X Tire holder bracket bolt nut Windshield hinge nut	15	**	4232	4230
Tire holder bracket bolt nut	1/2	16 20	T-4 T-4	4320-475 2420-1820
Windshield hinge nut	9%	20	1 -4	2420-1020
MUFFLER Muffler head retainer bolt and nut	0	18	Т-4	4218-3118
Muffler rod nut		16	T-4 310	4320-1214
RADIATOR				
Radiator stud nut		18	T-4 6310	4218-1820
REAR AXLE				
Axle housing bolt and nut	1/2	16	T-4 T-4	575-4116
Differential case stud nut	18	18 16	T-4 T-4	4218-6118 4116-4320
Differential drive gear screw	15	30	T-4 110X	4330-2830
Drive shaft roller bearing cap screw	5/8	20	T-4	4320-1820
Drive shaft roller bearing stud nut	5/8	20	T-4	4320-2018
Drive shaft roller hearing set screw	5/8	20 30	T-4 110X	4320-1820 4330-2830
Rear axie shaft castle nut	18	24	T-5	4218-2422
Axle housing bolt and nut Differential case stud nut Differential drive gear screw Drive shaft castle nut Drive shaft roller bearing cap screw Drive shaft roller bearing stud nut Drive shaft roller bearing set screw Rear axle shaft castle nut Rear radius rod holt and nut Rear axle housing drain plug DILINIAL COLUMN AND SHIEL	18	30	T-4	4330-4230
RUNNING BOARD AND SHIEL	DS			
RUNNING BOARD AND SHIEL Running board to front fender bolt and nut	1/2	16	T-4	4320-1214
Running board to rear fender nut	½	16	T-4	4320-1214
SPRINGS	1.1	00	CD 4	4220 0004
Front and rear spring hanger nuts Front spring clip nut	· · · · · · · · · · · · · · · · · · ·	22 28	T-4 911X	4330-2224 4330-2830
Front spring perch nut	19	30	110X	4330-2830
Rear spring clip nut	7/8	28	911X	4330-2830
	1	32	911X	3432
STEERING GEAR		10	(T) 4	4010 1010
Steering connecting rod ball socket bolt &	nut 1	18 24	T-4 T-4	4218-1218 4218-2422
Steering post bracket holt and nut		18	T-4	4218-1820
Steering gear post castle nut Steering post bracket holt and nut Steering tube flange screw nut	1/2	16	T-4 T-10	4116-1214
Steering yoke clamp bolt and nut	· · · · · · } है	22	T-4	4330-2224
TRANSMISSION		18	T-4	4010 1000
Brake and reverse support bolt nut	30	18	T-4 T-10	4218-1820 6118-3118
Clutch pedal support bolt	14	18	T-4	4218-1820
Clutch release fork clamp screw	16	18	T-4 T-10	3118-6118
Clutch pedal support bolt Clutch release fork clamp screw Controller shaft bracket bolt and nut Transmission band adjusting nut		16	T-4	4320-1416 4222X
Transmission band admissing screw him		**		4230 4230
Transmission cover holt and nut		18	T-4 310	4218-3118
	16	18	T-4	4218-575
WHEELS		00	F 0 0	H000 1000
Rim bolt nuts	5/8	20 30	500 110X	5020-4320 5504-4330
Wheel hub cap (front and rear)	15% 00	ct.		5504
Rear hub lock nut Wheel hub cap (front and rear) Wheel hub flange bolt nut	ii	22	T-5 310	4330-2422
			EOD WOS	W ON BODS
ADDITIONAL BLACKHAWK WRENC			FUR WUR	K ON FORD
	L "T" TRU	CK		-
MISCELLANEOUS	-/	20	11077	0010 1110
Drive shaft tube flange helt		28 24	110X T-4	2830-4330 4218-2422
Differential case bolt	5/9	20	110X	4320-1820
Brake shoe bolt nut Drive shaft tube flange bolt Differential case bolt Differential case bolt nut		22	T-5	4330-1220
		22	T-5 T-4	4330-1220
Rear axle housing drain plug	/8	28 g. 018	T-4 T-4	4330-2830 4219X
Rear axle housing cap bolt	3/4	24	T-5	4218-2422
Hub brake expander nut Rear axle housing drain plug Rear axle housing cap bolt Rear spring clamp	16	18	T-4	4218-575
Rear radius rod bolt nut Rear spring hanger nut	/8	28 28	110X 110X	4330-2830 4330-2830
Acar Spring hanger nut		40	IIUA	4330*2030

Hudson "Super Six"

Owners Set

No. 16 —½" Hex. Socket\$0.	35
No. 18 — 16" Hex. Socket	
No. 20 — 5/8" Hex. Socket	
No. 24 — 3/4" Hex. Socket	
No. 25 — 32 Hex. Socket	
No. 26 — 32" Hex. Socket	15
No. 28 —1/8" Hex. Socket	
No. T-5—Q. D. Double End Offset	
No. T-8-Q. D. Extension Bar	
No. 500 —Dem. Rim Nut Speeder 1.3	
No. 3310—Q. D. Tee Handle 1.6)()
	_
\$6.3	50

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON HUDSON "SUPER SIX" CARS—MODEL 1927-1928

	Size across Flats on	Q.D.Wres		Wrenches ded and Fixed
Part Name	Nuts	Socket		Type Sockets
BODY PARTS			114114160	A) PC DOCKETS
Body to frame bolt nut Dash to body nut	14	24 14	T-2 310 T-5	524-2224 475-1618
BATTERY Battery bracket clamp nut	1/2	16	T-4	1416-475
BRAKES Brake band adjusting nut (rear) upper Brake band adjusting nut (rear) lower Brake band adjusting nut front (upper) Brake band adjusting nut front (lower)	3/4	31 24 24 24 24	110X T-4 110X 110X	4218-1124 1124-4424 1124-2422
BUMPERS Bumper bracket to frame bolt		18 20	T-5 T-4	1820-4218 1820
CARBURETOR Carburetor to cylinder nut Carburetor to exhaust manifold nut		18 18	T-4 T-5	575-1318 575-1318
CLUTCH Clutch housing to cylinder bolt		24 16	T-5 T-5	2422-4218 575-1116
FAN Fan bracket adjusting clamp bolt	3/4	24	110X	2422
FENDERS Front fender bracket to frame bolt Front fender to bracket nut Rear fender to body bolt Rear fender to body bolt	16	18 18 16 24	T-5 T-5 T-5 T-5	575 575 475-2216 1820-4424
FRONT AXLE Steering spindle nut Steering spindle arm nut Steering arm ball nut	1 3/8	44X 44X 30	T-4 X T-4 X T-5	2830-4330
GASOLINE TANK Gas tank support nut		18 14	T-5 310 T-5 210	575-1218 475-1416
GENERATOR Generator bracket nut		24 28	T-5 T-5	1224
HEAD LAMP Head lamp bracket to fender nut Head lamp stud nut Head lamp tie rod to fender nut	1.0	28 18 18	110X 911X T-5	2224-1224 575-1318 575-1318

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON HUDSON "SUPER SIX" CARS—MODEL 1927-1928—Continued

Part Name		Q.D.Wrene Combina	tions Weld	Wrenches ded and Fixed Type Socket
Cam shaft gear screws Connecting rod stud nut Cylinder to base nut Cylinder to crank case nut Cylinder head stud nut Exhaust manifold to cylinder screws Flywheel to crank shaft bolt nut Flywheel counter balance stud nut Flywheel guard screw Horn bracket to frame nuts Main bearing stud nut Motor support bolt and nut Motor drain plug Timing gear cover screws Timer to stand screws Timer to stand screws Valve cover nut Water pump cover screws Water inlet connecting nut Water outlet connection to cylinder screw	54 34 34 34 34 34 34 34 34 34 3	22 2 20 28 18 25 18 25 18 24 24 16 16 24 24 718 16 24 18 16 14 18 16 18	T-5 310 110 X T-4 T-5 610 T-5 T-5 610 110 X T-5	2422 3120 2218 2224-2830 6118-3118 1125 6118-2118 2224-4218 2224-4218 2224-4218 2224-4218 2224-4218 2224-4218 2234-4218 224-4218 575-1416 575-2116 475-1416 575-2116 475-1416 575-1820 575-1618
MUFFLER Muffler to pipe bolt Muffler support bolt Muffler tail pipe support bolt	1/2	16 16 16	T-5 310 T-5 T-5	575-3116 1316-575 1316-575
RADIATOR Radiator support stud nut	3/4	24	T-6 110X	2224
REAR AXLE Differential case cap screw Rear axle shaft nut Rear axle drain plug Rear axle filler plug Rear axle cover screws Rear axle differential carrier housing cap screw Rear axle pinion hearing clamp holt	11'0 5'8 18	31 46X 020 026 18 31 24	110 X T-4X 210 T-5 T-5 610 T-5 T-5	3118-6118 2422-4424
RUNNING BOARD Running board to support bolt nut Running board to fender bolt		18 18	T-15 T-5	575-2118 575-1820
SPRINGS Front spring shackle bolt (rear) Front spring shackle bolt nut (rear) Front spring bolt nut (front) Front spring clip nuts Front rebound clamp bolt nut Rear spring shackle bolt nut (rear) Rear spring shackle bolt nut (front) Rear spring rebound clamp bolt Rear spring clip nut	78	26 28 34 28 16 30 31 16 28	110 X 911 X 110 X T-5 T-4 110 X T-5 T-5 T-5	1126-4926 2830-4330 3432-1003 2830-4330 475-1416 2830-4330
STARTER Starter bracket screws	3/4	24	T-5	4218-2422
STEERING GEAR Steering gear case stud nut Steering gear case bracket clamp bolt Steering gear to bracket bolt	1/2	24 16 24	T-5 T-5 T-5	2422-4218 575-1618 2422-4218
TIRE CARRIER Tire carrier to frame nut Tire carrier lock nut		24 24	T-5 500	2224-4218 5024
TRANSMISSION Transmission cover screws Transmission drain plug Transmission oil level plug Transmission rear bearing cover screw Transmission to motor bolt Pedal bracket bolt	3/4 7e	16 024 014 18 24	T-5 T-5 T-5 T-5 T-5 T-5	575-1316 575-1618 4424-1124 1318-1618
WHEELS Hub bolt nut Demountable rim nut	34	25 24	T-5 500	1125 5024

Hupmobile "Six Owners Set

No. 16 — ½" Hex. Socket
No. 20 —5/8" Hex. Socket
No. 22 — 13" Hex. Socket
No. 24 — 3/4" Hex. Socket
No. 26 — 16" Hex. Socket
No. 28 —7/8" Hex. Socket
No. T-5—Q. D. Double End Offset
No. T-8—Q. D. Extension Bar
No. 500 — Dem. Rim Bolt Nut
No. 3310—Q. D. Tee Handle 1.00

\$6.40

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON HUPMOBILE "SIX" CARS-MODEL 1928

		Q.D.Wrei		Wrenches
	Flats on			elded and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
BODY PARTS				
Body to frame bolt nut	· · · · · · · · · · · · · · · · · · ·	18	T-2 110X	310 518-1618
BRAKES	1/2	16	T-4	575-1416
Front brake adjusting cam nut	16	18	110X	575-1618
Front brake lock bolt nut		18	110X	575-1618
Front brake cross shaft support bolt		18	110X	575-1218
Front brake cross shaft bracket bolts	1/2	16	T-5	575-1216
Rear brake adjusting cam nut		18	110X	575-1618
Rear brake lock bolt nut	16	18	110X	575-1618
Rear brake cross shaft support holt		16	T-5	575-1416
Rear brake cross shaft lever bolt		18	110X	575-1618
Front rear stop bolt		18	110X	575-1618
Front bumper bracket to frame bolt		18	110X	575-1618
Front bumper to bracket screw		20	110X	1120-1820
Rear bumper bracket to frame screw		18 20	110X 110X	575-1618 144-1820
Rear bumper to bracket screw	5/8	20	1101	144-1020
CLUTCH CLUTCH	16	1.0	1119	1318
Clutch to flywheel cap screw	%	18	T-5	575-1218
Clutch release link adjusting nut		20	T-5	1820-4424
Clutch release link adjusting nut	· · · · · · · · · · · · · · · · · · ·	18	T-5	575-1820
Fan shaft blade screws FENDERS	1/2	16		1316
Front fender support to frame bolt nut	26	18	110 X	575-1618
Front fender to frame bolt		14	T-5	475-1416
Front fender to running board shield nut	76	14	T-5	475-1416
Front fender to running board bolt nut		14	T-5	475-1416
Rear fender to body screws		16	T-5	575-2216
Rear fender to shield screws		14	T-5 610	475-6114
Steering knuckle spindle nut		36	110 X	3640
Steering knuckle arm nut		36 28	110X 110X	3640
Steering knuckle tie rod ball stud nut Steering tie rod drag link plug		T-1	T-5	4330-2830
		T-1	210	
Drag link plug		1 - 1	210	
Gas tank support bolt nut	0	18	310	575-3118
Gas tank drain plug		012	T-5 210	
Generator to motor screws	5/6	20	T-5	1218
HEAD LAMP	78	20	1-5	1210
Head lamp stud nut		24	110X	2224-2422
Head lamp bracket to fender nut		18	T-5	575-1618
Tail lamp to bracket nut				1318
Cam shaft gear nut	176	14	T-5	1416
Connecting rod bolt nut		18	T-5	2218-3118
Cylinder head stud nut		20	T-5	3120-2220
Exhaust manifold to cylinder stud nut	16	18	T-5 210	575-2118

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON HUPMOBILE "SIX" CARS—MODEL 1928—Continued

Part Name	Nuts Flats on Size across	Socket I Combinat Q.D.Wrence	tions Web	Type Sockets ded and Fixed Wrenches
Exhaust manifold to pipe bolt nut Flywheel guard screws Intake manifold to cylinder screws Heater plate screw Intake manifold to heater screw Main bearing stud nut Motor drain plug Motor support bolt (front) Motor support bolt (rear) Oil pan to cylinder screws Oil pump screen flange screw Timing gear cover bolt nut Valve cover screws Water inlet to cylinder screws Water outlet connection screws Water pump to cylinder screws Water pump to cylinder screws		18 16 18 16 18 24 36 24 30 16 16 16 16 16 16 16 16 16 16 16 16 16	T-5 310 T-5 210 T-5	575-1618 3116-4116 575-2118 575-1416 575-1618 1224-2224 3640 1224 2830-4330 3116-4116 475-6116 575-6116 575-2116 575-2116 575-1416
Muffler support bolt Muffler to pipe bolt Muffler tail support bolt Muffler tail support bolt	· · · · · · · · · · · · · · · · · · ·	16 16 16	T-5 210 T-5 210 210	575-2116 575-2116 575-2116
RADIATOR Radiator support stud nut	16	18	310	1218-3118
REAR AXLE Differential drive pinion bearing adj. lock nu Differential drive pinion bearing sleeve lock nu Differential carrier cap screw Rear axle shaft nut Rear axle cover screw Rear axle drain plug Rear axle filler plug	1t 3/4 1 ₁ 7 ₆ 1 ⁶ 6 1/2	20 20 24 46X 18 016 718	T-5 T-5 110X T-4X T-5 T-5	4424-1820 4424-1820 2224-4218 2118-6118
RUNNING BOARD Running board to support bolt nut Running board to shield bolt nut	3/4 178	24 14	110X 210	2224-4218 475-2116
Shock absorber bracket bolt nut (front) Shock absorber bracket bolt nut (rear)	3/4 3/8	24 28	110X 110X	1124-4218 4330-2830
SPRINGS Front spring bolt nut (front) Front spring bolt nut (rear) Front spring clip nut Front spring clamp bolt nut Front spring bolt nut Front spring bolt nut Rear spring bolt nut (front) Rear spring bolt nut Rear spring clip nut Rear spring clip nut Rear spring clip nut		30 30 24 16 26 34 30 26 16 28	110 X 110 X T-5 T-4 110 X 110 X 110 X 110 X 110 X T-4 T-5	2830-4330 2830-4330 4218-2224 575-1316 1126 1003-3432 2830-4330 1126 575-1316 2224-2830
STARTER Starter to cylinder screw	16	18	T-5	575-1218
STEERING GEAR Steering gear adjusting screw Steering gear case cover screw Steering gear lever nut Steering gear support to frame bolt Steering post bracket to cowl bolt Steering gear oil plug	I/a	012 16 40 18 16 014	T-5 T-4 110X 110X T-5 T-5	475-1316 3640 575-1618 575-1316
TRANSMISSION Transmission cover screw Transmission to cylinder screws Transmission rear main bearing screw Transmission reverse gear cover screw	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	18 24 16 16	310 T-5 T-5 T-5	575-3118 2224-2422 575-1316 575-1316
Transmission main shaft flange nut Transmission drain plug Transmission filler plug Speedometer drive gear housing to trans, ser Universal joint bolt (front and rear) Universal joint bolt (front and rear)	3/4 3/4 ew 1/2	024 024 16 18	T-5 T-5 T-5	575-1618 1316 1318-575
WHEELS (DISC) Demountable disc wheel stud nut	3/4	24	500	5024
WHEELS (WOOD) Demountable rim bolt nut		24 22	500 T-5 310	5024 1220-3122

General

Car Owners Set

For all cars not individually listed in the following pages this set has been found to be highly satisfactory. This set will handle the adjustments, and repairs of the various cars registered below. If a prospect comes in for a socket or handle for a particular job on any car listed on this page, sell him the complete set.

Many of your customers will want a sturdy carrying case. On Page 38 you'll find these attractive steel cases cataloged. Ask your jobber's salesman to provide you with at least one each of the Model A, B, and C Case.

No. 16 — 1/2" Hexagon socket	\$0.35
No. 18 — 1/16" Hexagon socket	35
No. 20 —5/8" Hexagon socket	.35
No. 22 — 1/16" Hexagon socket	.35
No. 24 —3/4" Hexagon socket	.45
No. 28 — 7/8" Hexagon socket	.45
No. T-4 —Offset and Tee	75
No. T-5 — Double end handle	.75
No. T-10—10" extension bar	.75
No. 3310—12" Tee handle	1.00
No. 500 —Brace	
Set complete	\$6.75

Cars for Which This Set Is Especially Recommended Are Listed Below

Auburn	Kissel
Durant	Lincoln
Elear	Locomobile
Erskine	Moon
Falcon-Knight	Peerless
Franklin	Pierce-Arrow
Gardner	Stearns-Knight
Gray	Stutz
Jordan	Velie

BLACKHAWK Cabinet Assortments of Q. D. Wrenches



No. 1 Stock Cabinet Contains

WRENCH HANDLES AND PARTS hree No. T-4 offset and T handles. Three No. T-4 offset and Three No. T-5 double end handles.

Four No. 110X offset handles. Three No. 1-3 doubte control of the No. 110X offset handles. Four No. 1310 long T handles. Four No. 5310 long T handles. Four No. 500 brace wrenches. Four No. 610 speeders, 19 \(\frac{1}{2} \) in overall. Four No. 911X ratchet handles, 10 in. long. The No. 13 reversible ratchets. Two No. T-3 reversible ratchets. Four No. T-60 extension bars, 6 in., with

speed grip. speed grip.
Four No. T-8 extension bars, 8 in. long.
Four No. T-10 extension bars, 10 in. long.
Two No. T-4X heavy duty sliding tee.
Two No. T-8X heavy duty extension bar,
8½ in. long.
Two No. T-17X heavy duty extension bar,
17 in. long.
HEXAGON SOCKETS

HEXAGON SOCKETS

Six No. 14 hexagon sockets. Ten each Nos. 16, 18, 20 and 24 hexagon sockets.

Six each Nos. 22 and 28 hexagon sockets. Five each Nos. 19, 25, 26 and 30 hexagon sockets.

Three each Nos. 31, 34 and 36 hexagon

sockets. Four No. 32 hexagon sockets.

Pour No. 32 nexagon sockets.
Two each Nos. 40, 36X, 40X, 44X, 46X, 48X, 50X and 52X hexagon sockets.
SQUARE SOCKETS
Three each Nos. 012, 014, 016, 018 and 020

square sockets Two each Nos. 019, 022, 024, 028, and 032 square sockets

UNIVERSAL JOINTS Two each Nos. T-16, T-18, T-20, T-22 and T-24 universal joints.

One No. T-28 universal joint Three No. T-2 universal joint

Three No. T-2 universal joints.

ADAPTERS
Two each Nos. T-9, T-9X, T-7 and T-7X.

TIE ROD SOCKETS
Three No. T-1 tie rod sockets.

VALVE GRINDER ATTACHMENTS
Three No. T-11 valve grinder attachments.

SPARK PLUG SOCKETS
Two each Nos 128, 130 and 136 expert plug

Two each Nos. 128, 130 and 136 spark plug

sockets.
TOTAL CONTENTS—216 tools. No. 1 Cabinet Complete\$156.70

Nos. 1 & 1A Cabinets

The cabinet is all steel, beautifully lithographed in four colors. The lower part is arranged with drawers for sockets, as well as other items contained in cabinet.

This cabinet contains the most complete set of wrenches and combinations for garage or service station use, manufacturer or farmer.

Size of Cabinet: 28" High, 251/2" Wide, and 113/4" Deep.

No. 1A Stock Cabinet Contains

WRENCH HANDLES AND PARTS Two No. T-4 offset and T handles. One No. T-5 double end handle. Two No. 110X offset handles. Two No. T-15 half speeder or crank handles. Three No. 3310 long T handles. Two No. 500 brace wrenches. Two No. 610 speeders, 19 % in. overall.
Two No. 911X ratchet handles, 10 in. long.
Two No. T-60 extension bars, 6 in., with Two No. 1-00 extension speed grip.
One No. T-3 reversible ratchet.
Two No. T-8X extension bars, 8 in. long.
Two No. T-10 extension bars, 10 in. long.
One No. T-4X heavy duty sliding tee.
One No. T-8X heavy duty extension bar,

8½ in. long. One No. T-17X heavy duty extension bar,

17 in. long.

HEXAGON SOCKETS

Three No. 14 hexagon sockets. Six each Nos. 16, 20, and 24 hexagon sockets.

Eight No. 18 hexagon sockets. Four No. 22 hexagon sockets. Three each Nos. 19, 25, 26 and 28 hexagon

sockets. Two each Nos. 30, 31, 32 and 34 hexagon sockets.

One each Nos. 36, 40, 36X, 40X, 44X, 46X, 48X, 50X and 52X hexagon sockets.

SOUARE SOCKETS One each Nos. 012, 014, 016, 019, 022, 024,

028 square sockets. Two each Nos. 018 and 020 square sockets.

UNIVERSAL JOINTS
One each Nos. T-16, T-18 and T-20 univer-

sal joints. Two No. T-2 universal joints.

ADAPTERS
One Nos. T.9, T.9X, T.7 and T.7X.
TIE ROD SOCKETS
One No. T.1 tie rod socket.

VALVE GRINDER ATTACHMENTS Two No. T-11 valve grinder attachments.
SPARK PLUG SOCKETS

One each Nos. 128, 130 and 136 spark plug sockets.

TOTAL CONTENTS-114 tools. No. 1A Cabinet Complete\$89.40

BLACKHAWK No. 2 Cabinet Assortment of Q. D. Wrenches



An Inexpensive Merchandiser

This cabinet was especially designed to meet the demand for an inexpensive assortment of wrenches containing all the most popular sizes of sockets and Q. D. Handles.

Every hardware, accessory and parts dealer will find this merchandiser a real profit making silent salesman. Sets of wrenches or individual wrenches can be made up for mechanics or for any car. "Wrench Manual" furnished with cabinet tells you just what size is required for every bolt or nut on any car.

Table of socket sizes listed on the inside panel of one door, and a quick reference price chart on the other. No time wasted making sales. Complete in every detail.

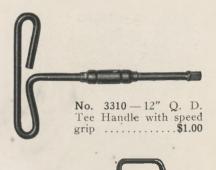
All steel cabinet, beautifully lithographed in three colors. Size is 1934" high, 1634" wide and 834" deep. Each drawer compartment is labeled in front showing contents.

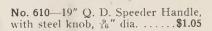
CONTENTS

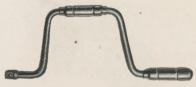
	CONTE	AID	
HAN	IDLES AND ATTACHMENTS		HEXAGON SOCKETS
Four	No. T4 offset and T handles	Eight	Nos. 18 and 20.
Four	No. T5 double end handles.	Six	Nos. 16, 22 and 24.
Four	No. 110X offset handles.	Four	No. 14.
Four	No. 3310 long T handles.	Three	Nos. 26 and 28.
Four	No. 500 brace wrenches.	Two	Nos. 19, 25, 30 and 32.
Two	No. 911X ratchet wrenches, 10 in.		SQUARE SOCKETS
	long.	T	hree No. 018.
Two	No. T13 ratchet wrench lugs.		
Two	No. T2 Universal Joints.		
Three	No. T11 valve grinder attachments.		
	No. T10 extension bars, 10 in. long.		
Two	No. T60 extension bars, 6 in. with		
	speed grip.		

No. 2 Stock Cabinet Assortment—Contains 88 tools. Weight of wrenches 54 lbs. Weight of cabinet 16 lbs. List complete\$54.45

BLACKHAWK Q. D. Handles







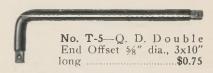
No. 500—Q. D. Brace Handle, ½" dia. One piece steel grips\$1.20





Q. D. handles have solid milled shoulder providing unusual strength at point of greatest strain. Shoulder also prevents sockets from slipping over handle. An exclusive Blackhawk feature.

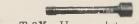






No. 110-X—Q. D. Offset Handle, 56" dia., 10" long\$0.90







No. T-17X—This bar same as T-8X except that it is 17" long.....\$1.40



No. T-4X—Heavy duty sliding Tee handle 18" long, 18" dia., with friction head to retain the bar at any position in the head. \$1.50

BLACKHAWK Q. D. Attachments

EXTENSION BARS

BLACKHANK

Weight Each 7 oz. \$0.65 10 oz70 13 oz75



With Speed Grip
Nos. Length Weight Each
T-60 10 in. 12 oz. .75



SOCKET ADAPTERS

No. T-7X—Adapter for sockets having ¾" square handle openings to fit handles having ¾" square lug. Each \$0.75

No. T-9X—Adapter for heavy duty sockets to standard ½" handles. Each \$0.50



No. T-7—Adapter to accommodate sockets having \(\frac{5}{8}'' \) square handle opening to fit \(\frac{3}{4}'' \) square heavy duty handles. Each \(\frac{5}{4}'' \) heavy duty handles sockets to \(\frac{3}{4}'' \) heavy duty handles. Each \(\frac{5}{5} \).





RATCHETS



No. T-3\$2.25

UNIVERSAL JOINTS



UNIVERSAL JOINT SOCKETS



Used in connection with all Q. D. handles. Are made extra strong, properly heat treated. Save you lots of time reaching those nuts hidden under crank cases that cannot be reached with regular sockets.

No. So	cket Sizes		Each
T-16-1/2"	hexagon		
T-18—-18 "	hexagon		1.50
T-20—5/8"	hexagon		1.50
T-22—††"	hexagon		1.75
T-24—3/4"	hexagon		1.75
T-26—†∄"			1.75
T-28—7/8"			
1/	eight 7 oz	z. each	

SPARK PLUG SOCKETS



No.	128-7/8" hexagon plugs	\$0.65
No.	130—½" (Ford size)	.65
No.	132-Metric (HudEssex)	.75
No.	136-11/8" hexagon plugs	.75

BLACKHAWK Q. D. SOCKETS



STANDARD Q. D. HEXAGON SOCKETS Sq. Handle Openings Table of Standard Hex. Sockets

		DIE OI C	tanuaru	IICA. D	uckets		
Socket No.	Socket Size	U.S. S. Nuts	Hex. Head Cap Screws U. S. Std.	S.A.E. Std. Nuts and Cap Screws	Mfg. Std. Bolt Hds.	Coach	List Price
14	7-16	-	1-4	1-4	1-4		. 35
16	1-2	1-4	5-16	5-16			. 35
18	9-16	131	3-8	3-8		3-8	. 35
19	19-32	5-16					.35
20	5-8		7-16	7-16	3-8		. 35
22	11-16	3-8					.35
24	3-4		1-2	1-2		1-2	. 45
25	25-32	7-16					. 45
26	13-16		9-16		1-2	1.0	. 45
28	7-8	1-2	5-8	9-16			.45
30	15-16			5-8		5-8	. 55
31	31-32	9-16				-	.55
32	1		3-4	11-16	5-8		.55
34	1:1-16	5-8		3-4			. 65
36	1:1-8		7-8			3-4	. 65
40	1:1-4	3-4	1 *	7-8			. 65

STANDARD Q. D. DOUBLE HEXAGON SOCKETS 1/2" Sq. Handle Openings
Table of Double Hex. Sockets

Socket No.	Socket Size	U.S. S. Nuts and Bolts	Hex. Head Cap Screws U. S. Std.	S.A.E. Std. Nuts and Cap Screwe	Mfg. Std. Bolt Hds.	Coach	List Price
D14	7-16		1-4	1-4	1-4		. 40
D16	1-2	1-4	5-16	5-16			. 40
D18	9-16		3-8	3-8		3-8	. 40
D19	19-32	5-16					. 40
D20	5-8		7-16	7-16	3-8		. 40
D22	11-16	3-8					. 50
D24	3-4		1-2	1-2		1-2	. 50
D25	25-32	7-16					. 60
D26	13-16	-	9-16		1-2		. 60
D28	7-8	1-2	5-8	9-16			. 60

Double Hex. Sockets not in Cabinet Assortment. STANDARD Q. D. SQUARE SOCKETS
Sq. Handle Openings
Table of Square Sockets

	Table of Squite Suckers							
Socket No.	Socket Size	U. S. S. Nuts	U.S.S. Cap Screws	Square Head Set Screws	Coach	List Price		
012	3-8		1-4	3-8	1-4	.35		
014	7-16		5-16	7-16		.35		
016	1-2	1-4	3-8	1-2		.40		
018	9-16		7-16	9-16	3-8	.40		
019	19-32	5-16				.45		
020	5-8		1-2	5-8		. 45		
022	11-16	3-8	9-16			45		
024	3-4		5-8	3-4	1-2	_55		
025	25-32	7-16				. 55		
026	13-16					_55		
028	7-8	1-2	3-4	7-8		. 65		
030	15-16				5-8	. 65		
032	1	9-16		1		_65		
034	1:1-16	5-8				. 80		
040	1:1-4	3-4	1	1:1-4		. 80		

HEAVY DUTY Q. D. SOCKETS

"Sq. Handle Openings
Sockets are Interchangeable with Std. or Extra
Heavy Duty Sockets or Handles
by use of Adapters
Table of Heavy Duty Hex. Sockets

_								
	Socket No.	Socket Size	U. S. S. Nuts and Bolts	Hex. Head Cap Screws U. S. Std.	S.A.E. Std. Nuts and Cap Screws	Mfg. Std. Bolt Hds.	Coach	List Price
-	30x	15-16			5-8		5-8	. 55
	32x	1		3-4	11-16	5-8		. 55
	34x	1:1-16	5-8		3-4			. 65
-	36x	1:1-8		7-8			3-4	. 70
-	38x	1:3-16				3-4	-	.70
4	10x	1:1-4	3-4	1	7-8			.70
4	12x	1:5-16					7-8	.80
4	14x	1:3-8		1:1-8		7-8		.80
4	16x	1:7-16	7-8		1			.80
4	18x	1:1-2		1:1-4			1	1.00
E	0x	1:9-16				1		1.00
5	2x	1:5-8	1		1:1-8			1.20

BLACKHAWK Cases for Q. D. Wrench Sets

Stamped from twenty gauge sheet steel, finished in bright black

baked enamel, handles securely fastened.

Every dealer who has one of our stock cabinets should put in a stock of these boxes in order to be able to make up sets for use with the various makes of cars. List of tools used in the various car sets will be found in our special Q. D. Wrench Manual, "A Set for Every Car."



No. C

	All cases finished in bright black baked enamel.	
No.	A-16 in. long, 634 in. wide, $2\frac{1}{2}$ in. high. For car owners' sets\$2.50	
No.	B — $19\frac{1}{16}$ in. long, $5\frac{1}{16}$ in. wide, $2\frac{1}{2}$ in. high	
No.	$C-19\frac{7}{8}$ in. long, $8\frac{1}{8}$ in. wide, $2\frac{7}{2}$ in. high	
No.	$D-23\frac{1}{8}$ in. long, 11 in. wide, $2\frac{1}{2}$ in. high 6.00	
No.	H—11 in, long, 43/4 in, wide, 11/4 in, high	

BLACKHAWK Q. D. Socket Wrench Sets

No. 18A SET



Set contains 18 tools. A very handy compact set of Q. D. wrenches, handles and sockets for mechanics. Also makes a very compact set for car owner who makes his own repairs.

Contents of Set

One No. 911X ratchet handle. One No. T-4 sliding tee and offset handle.

One No. T-15 half speeder handle.

One No. T-60 extension bar with speed grip.

One No. T-10 extension bar. One No. 500 brace handle.

One each Nos. 128 and 136 spark plug sockets.

One each Nos. 14, 16, 18, 19, 20, 22, 24, 25, 26 and 28 hexagon sockets.

BLACKHAWK Q. D. Socket Wrench Sets

No. 22C SET



Set contains 22 tools, covering complete range of handles and 10 popular sizes of hexagon sockets. Especially adapted for mechanics.

Contents of Set One No. 911X ratchet

handle.

One No. 610 speeder handle.

One No. 500 brace handle. One No. T-5 offset handle. One No. T-10 extension bar.

One No. T-60 speed grip extension bar.

One No. T-2 Universal joint.

One No. T-4 sliding tee. One No. 3310 tee handle with speed grip.

One No. T-11 valve grinder attachment. One each Nos. 130 and 136 spark plug sockets.

One each Nos. 14, 16, 18, 19, 20, 22, 24, 25, 26 and 28 hexagon sockets.

No. 22C Set-Complete, packed in Metal Case No. C\$18.95 Weight Per Set 21 lbs.

Set contains 32 tools. A very complete set for garage use. Will give the mechanic the range of sizes and types of handles he needs for almost any kind of work.

Contents of Set

One No. 911X ratchet han-

One No. 610 speeder han-

One No. 500 brace handle. One No. T-10 extension

One No. T-60 extension bar with speed grip.

One No. T2 universal joint handle. One No. T-4 sliding tee.

One No. 3310 tee handle with speed grip.

One No. T-11 valve grinder attachments. One No. 110X offset handle. One No. T-1 tie rod socket.

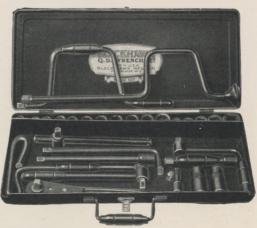
One each Nos. 012, 014, 016, 018 and 020 square sockets.

One each Nos. 14, 16, 18, 19, 20, 22, 24, 25, 26, 28, 30, 31, 32 and 34 hexagon sockets.

One each Nos. 130 and 136 spark plug sockets.

No. 32C Set—Complete in Metal Case No. C Weight Per Set 231/2 lbs.

No. 32C SET



BLACKHAWK Q. D. Socket Wrench Sets

These sets can be made up from your cabinet assortment. Your jobber can supply you with steel cases.

No. 35B HEAVY DUTY SET



One No. T-8X extension bar, $8\frac{1}{2}$ in. long. One No. T-17X extension bar, 17 in. long.

Eight hexagon sockets, sizes 1½ to 1½ in. Nos. 36X, 38X, 40X, 44X, 46X, 48X, 50X and 52X,

Weight Per Set 201/2 lbs.

Contents of Set

Set contains 43 tools. A superior service set of Q. D. wrenches. Made up by combining No. 32 regular service set and No. 35 heavy duty set and all tools combining all the tools contained in No. 32 regular service set and No. 35 heavy duty set.

With this set the mechanic has every necessary tool for working on all automobiles and largest trucks.

No. 43D Set—Complete in metal Case No. D\$36.95 Weight Per Set 48½ lbs. Heavy duty socket and handles for industrial use, trucks, tractors, farm engines and machinery.

Every garage should have one of these sets, especially for wheel, drive shaft, axle shaft and steering arm nuts. Case is made of 20 gauge steel.

Contents of Set

One No. T-4X sliding tee handle, 19 in. long, bar made from 18 in. stock with 34 in. square shank on sliding socket adapter.

No. 43D SET



Push the sale of the metal-case set idea to mechanics, car owners, farmers and industrial concerns.

SPARK PLUG SIZES

Blackhawk

		C CLD.		В	Socket
Name of Car	Model	1928	1927	1926	NO.
Auburn	66	The part of the pa	100000000000000000000000000000000000000	444	130
Auburn	77	18	16		130
Auburn	88 Special	18	18	***	130 128
Buick -	Master	/8 29	/8 22	7/8 7/8	3329
Buick Chandler	Standard Royal-8	7% 18 1 1%	11/6	11/8	136
Chandler	Royal-6	11/8	788 1148 1488 1488 1488 1488 1488 1488 1	1 1/8	136
Chandler	Big-6	1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6 1 1/6	1 1/8	1 ½ 1 ½	136
Chandler	31 Special	1 1/8	1 1/8	1 1/8	136
Cadillac	341	1 1/8	1 1/8	1 1/8	136
Chrysler	52	1 1/8	1 1/8	1 1/8 1 1/8 1 1/8 1 1/8	136 136
Chrysler	62 72	1 78	1 78	1 7/8	136
Chrysler Chrysler	80	1 1/6	11/6	1 1/8	136
Chevrolet	Four	11/8	11/8	1 1/8	136
Chevrolet	Four	138			136
Diana	Eight	1 1/8	11/8	1 1/8	136
Dodge	Four	11/8	11/8	11/8	136 136
Dodge Dodge	Six Victory-6	1 1/8	11/8	1 1/8	136
Elear	8-78	114	***	***	136
Erskine	Six	1 1/8	1 1/8	1 1/8	136
Essex	Six	1	1	1	132
Falcon-Knight	Eight	78	7/8	7/8	128
Flint	60	1 1/8	1 1/8	1 1/8	136
Flint	80	11/8	. 11/8	11/8	136 130
Ford Ford	T A	116	1 1/8	18	128
Franklin	Eight	1 1/8	1 1 2	18	130
Gardner	Eight	18	15 16 16	10	130
Hudson	Super-6	1	1	i	132
Hupmobile	A-Six	1 1/8	1 1/8	1 1/8	136
Hupmobile	Century Eight	1	11/	117	132
Jordan	Eight	1 1/8	1 1/8	11/8	136 136
Jordan Kissel	Six Big-8	11/4	1 1/6	1 ½ 1 ½	136
Kissel	Small-8	1 1/8 1 1/8 1 1/8	1 ½ 1 ½ 1 ½ 1 ½	1 1/0	136
Kissel	Eight	1 1/8	1 ½ 1 ½	1 1/8	136
La Salle	Eight	11/8	11/8	1 ½ 1 ½	136
Lincoln	Eight	1 ½ 13 1 ½	1 1/8 15 1 1/8	1 1/8	136
Marmon	Small Eight Big Eight 660 Small-6	114	16	1 1/8	130 136
Marmon Moon	660 Small-6	1 1/8	1 78	1 1/8	136
Moon	672 Big-6	1 1/8	11/9	11/8	136
Nash	Advanced-Six	88	54	33	3329
Nash	Special-Six	11/8	1 1/8 1 1/8 51/8	1 1/8	3329
Nash	Standard-Six	1 1/8	1 1/8 1 1/8 1 1/8 1 1/8	1 1/8	136
Oakland	All-American-6	1 1/8	1 1/8	1 1/8 1 1/8 7/8	136 136
Oldsmobile	Eight	1 1/8 52	1 78	1 % 76	1329
Oldsmobile Oldsmobile	Six Six 1928	T .		/8	132
Packard	Eight	1 1/8 1 1/8 1 1/8	11/8	11/8	136
Packard	Six	1 1/8	1 1/8	1 ½ 1 ½	136
Paige	6-45 & 6-45A	I 1/8	1 1/8	1 1/8	136
Paige	6-65	1 78	1 1/8	11/8	136
Paige Paige	6-75 8-85	1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8	1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8	1 1/8	136 136
Peerless	6-60	11/8	11/8	1 1/8	136
Pecrless	6-80	1 1/8	1 1/8	11/8	136
Peerless	8-69	11/8	11/8	1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8 1 1/8	136
Peerless	6-90	1 1/8	1 1/8	1 1/8	136
Pierce-Arrow	80	1/8	1 1/8	1 1/8	136
Pierce-Arrow	81 Six	1 1/8	1 1/8	1 1/8	136 136
Pontiac Reo	Wolverine	18	1 18	7/6	130
Reo	Flying Cloud	1 1/8 1 1/8 1 1/8 1 1/8	1 1/8	7/2	130
Star	Six	1 1/8	1 1/8	1 1/8	136
Star	Six Four	1 1/8	1 1/8	118	136
Stearns-Knight	Eight -	5 <u>5</u> 3 1	32	55	1329
Studebaker	Std. Dictator-6	1 3 3	1 3 2	3 2	3731 3731
Studebaker	Com-6	1 1/8	32	9.9	136
Studebaker	President-8 Six	1	i	i	132
Stutz	Eight	1	1	1	132
Willys-Knight	66A-6	1 1/8	1 1/8	1 1/8	136
Willys-Knight	70A-6	114	1	1	132
Whippet	93A Four	1 1/8	1 ½ 1 ½	1 ½ 1 ½	136 136
Whippet	96 Six	-70	- /8	*/8	130

La Salle

Owners Set

No. 16 — 1/2" Hex. Socket\$0.3	5
No. 18 — 16" Hex. Socket	5
No. 20 —5/8" Hex. Socket	
No. 22 — 16" Hex. Socket	
No. 24 —¾" Hex. Socket	
No. 25 — 18" Hex. Socket	_
No. 28 — 7/8" Hex. Socket	
No. 34 —116" Hex. Socket	
No. T-5—Q. D. Double End Offset	
No. T-8-Q. D. Extension Bar	
No. 500 — Dem. Rim Nut Speeder 1.2	
No. 3310—Q. D. Tee Handle 1.0	0
0.0	_

\$7.05

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON LA SALLE CARS MODEL 1927-1928

Part Name BODY PARTS	Size across Flats on Nuts		ations Wel	Wrenches ded and Fixed Type Sockets
Body to frame	35	25	T-5 310	3125
BATTERY Battery box clamp nuts	½	16	T-5	575-1618
BRAKES Brake countershaft bracket nut	1/2	18 16 18 20	T-5 T-2 6310 6310 T-5	575-2018 6316-575 6318-1820 1820-2018
BUMPERS Front and rear bumpersFront tie rod	5/8	20 16	T-5 T-5	144-1820 575-1618
CARBURETOR Carburetor to manifold nut		18 18	6310 6310	6318-575 6318-575
CLUTCH Clutch to motor housing	56	20	110X	1820-4424
FAN Adjusting nut	11/2	48 X	T-4X T-17	x
FENDERS Front fender to frame Rear fender to body Fender to running board	1/2	18 16 16	T-2 6310 6310 T-4 6310	6316-575 6316-575
FRONT AXLE Steering knuckle lever nut Steering knuckle nut Tie rod ball nut Drag link plug Tie rod plug Drag link ball nut	1 1/8	40 52 X 34 T-1 X T-1 34	110 X T-4 X 110 X 310 T-5 110 X	3640 1003-3432 1003-3432
GASOLINE TANK Hanger cap screw	5/8	20 34	T-4 110X	1820-2018 1003-3432
GENERATOR Generator support bolt nut	{}	22	T-8 500	1220-2220
HEAD LAMP Head lamp and fender support nut	5/8	• 20	T-5	1820-2018
MOTOR Connecting rod stud nut		18 20	T-5 310 T-2 6310	3118-2216

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON LA SALLE CARS MODEL 1927-1928—Continued

MODEL 1927-1920-	-Continued		Wassalasa
FI	across Q.D.Wro ats on Combi	nches & nations Wele	ded and Fixed
Part Name N	luts Socket		Type Sockets
Cylinder head stud nut Exhaust manifold to cylinder block stud nut Exhaust manifold to pipe bolt and nut Intake manifold to cylinder stud nut Motor support bolt and nut (front) Motor support nut (rear) Oil pan bolt Oil pan drain plug Drip pan nut Timer gear case screw Lower hose connecting cap screw Distributor attaching nut	18 18 18 20 1½ 36 1 32 16 1 32 16 18 18 18	6310 6310 6310 6310 T-6 110 X T-8 911 X 310 110 X T-5 T-4 T-4	6318 6318 6318 575-1220 3116-6116 3432 575-1214 3118-6118 1820-575 6316
Water outlet connection cap screw ,	18	T-2 6310	575-6318
MUFFLER Muffler to pipe nut Muffler hanger to frame Exhaust pipe to motor nut Exhaust pipe clamp nut Exhaust pipe rear hanger nut	18 5/8 20 1/2	T-5 T-5 T-5 T-5 T-5	1820-4424 575-1820 1820-2018 575-1618 575-1618
REAR AXLE Rear axle housing cap screw Rear axle drain plug Rear axle filler plug Universal housing nut Propeller shaft ball housing nut Rear brake adjusting nut	11/3 34 11/2 48X 5/8 20 5/8 20	T-5 110X T-4X T-17 T-5 T-5 110X	1820-4424 1003-3432 X 1820-2018 1820-2018 4218-4424
RUNNING BOARD Running board to apron bolt and nut Running board to support nut	14 1/2 16	T-5 T-5	475-1416 575-1618
SPRINGS Front spring clamp bolt nut Front spring clip nut Front spring shackle bolt nut Rear spring clip nut Rear spring shackle bolt nut Rear spring rear bracket nut	7/8 28 1 1/8 36 7/8 28 1 1/8 36	T-5 110 X 110 X 110 X 110 X 110 X 6310	475-1416 2830-4330 3640 2830-4330 3640 6318-575
STARTER Starter housing to case cap screw	5/8 20 18	T-5 T-5	1820-4424 575-2018
STEERING GEAR Steering post bracket to cowl bolt and nut Steering gear bracket to frame holt and nut Steering gear housing clamp bolt and nut Steering gear arm nut	3/4 24 18	T-5 T-5 6310 T-4 T-4X T-17	1820-2018 2422-4218 575-1618
TIRE CARRIER Tire carrier to frame		110 X 6310	2224-4218 6318-575
TRANSMISSION Transmission bottom cover stud nut Transmission power take off cover screw Transmission case to motor cap screw Transmission case to air pump Transmission case to gear shift lever case Trans. case to propeller shaft hall hous. stud nut. Transmission drain plug Transmission filler plug	18 5/8 20 18 18 18 5/8 20	T-5 T-5 T-5 T-4 6310 T-5 T-5 T-4X 110 X	575-3118 575-1820 4424-144 575-1618 575-1618 144-4424
WHEELS Rim nut	34 24 44 24	500 500	5024 5024-2224

Marmon "8" Model "68"

Owners Set

No. 16 —1/2" Hex. Socket\$6	.35
No. 18 — 10" Hex. Socket	
No. 20 —5/8" Hex. Socket	.35
	.45
70	.45
No. T-4—Sliding Tee Handle	
No. T-5—Q. D. Double End Offset	
No. T-8 -Q. D. Extension Bar	
No. 500 — Dem. Rim Nut Speeder	
No. 3310—Q. D. Tee Handle	.00
\$1	5.35

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON MARMON "8" MODEL No. "68" CARS—1928

	Size across Flats on	Combi	inations We	Wrenches ided and Fixed
Part Name BODY	Nuts	Socket	Handles	Type Sockets
Body to frame bolt nuts	5%	-020	T-5	
BATTERY	v	16	T-5	£75 1610
Battery box clamp bolt nut			_ ~	575-1618
Front brake adjusting nut	3/4	24 18	110X T-5	2422-4218 575-1618
Front cross shaft clamp bolt		16	T-5	575-1416
Front brake lever clamp bolt nut		18	110X	575-1820
Rear brake adjusting nut		24	T-5	2422-4218
Rear brake cross shaft clamp bolt		16	T-5	575-1618
Front & rear brake flange to housing screw		18	110X	575-1218
Front and rear brake anchor bolt nuts BUMPERS	, ,	28	110X	2830-4330
Front humper to bracket screw		28	110X	2830-4330
Front humper bracket to frame screw		28 28	T-5 110 X	2830-4330 2830-4330
Front bumper to bracket screw		20	110 X	1820-4222
CARBURETOR	78	20	11026	
Carburetor to intake manifold screw	· · · · 16			2018-1318
Clutch pedal bracket to transmission hous, scr- DISTRIBUTOR	ew	18	T-5	575-1618
Distributor clamp screw FAN		16	T-5	575-1618
Fan blade screw	· · · · 10	14	T-5	475-1416
Fan bracket to cylinder screw	1/2	**	****	1316
FENDERS				
Front fender support to frame bolt nut		16	T-5	575-1618
Front fender to running board shield nut		16	110X	575-1618
Front fender to running board bolt nut		16 18	110X 610 T-2	575-1618 575-618
Rear fender to body screws		16	T-5	575-4424
Rear fender shield to body nuts		14	T-5	475-1416
FRONT AXLE	18			
Steering knuckle spindle nut	1	32	110X	3432
Steering knuckle arm nut		34	110X	3432
Steering tie rod hall stud nut		24	T-5	2422-4218
Steering tie rod drag link plug		T-1	T-5	
King pin screw lock nut	16			2018
GASOLINE TANK		016	m r	
Gas tank drain plug	1/2	016	T-5	
GENERATOR Clamp bolt nut	T/	16	T-5	575-1316
· ·	* * * * 72	10	1-3	3/3-1310
HEAD LAMP Head lamp stud nut	7/9	28	T-5	2830-4330
Head lamp bracket to fender nut	1/2	16	T-5	575-1618

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON MARMON "8" MODEL No. "68" CARS—1928—Continued

Part Name	Size across Flats on Nuts		ations Wel	Wrenches ded and Fixed Type Sockets
MOTOR Cylinder head stud nut Exhaust and intake manifold stud nut ,	5/8	20 18	T-5 310 T-5 310	3120-2218 3118-1218
Flywheel to crank shaft cap screw Heater to exhaust manifold Heater to intake manifold Motor drain plug Motor support bolt (front) Motor support bolt (rear)	16	18 16 016	T-5 310 T-5 T-5	575-3118 575-1618
Oil pan to cylinder screw	· · · · · · /8 · · · · · · ¹ / ₂ · · · · · · · ¹ / ₂	20 20 20 16 16	T-4 T-4 T-5 310 610 T-5 T-5 310	1820-4424 1820-4424 1820-4424 3116-1216 575-6116 575-3116 1316
Water outlet to cylinder screw Water inlet to cylinder screw Water pump to cylinder screw	½	**		1316 575-2018
RADIATOR Radiator support bracket stud nut Radiator support bracket screw nut	5/8	20	6310	1316
MUFFLER Muffler support bolt nut Muffler to pipe bolt nut Muffler tail pipe support bolt nut	1/2	16 18 18	T-5 T-5 T-5	575-1618 575-1618 575-1820
REAR AXLE Rear axle shaft nut Rear axle drain plug Rear axle cover screw	11/4	40 716 18	110X T-5 T-5 610	3640 575-6118
RUNNING BOARD Running board support bolt nut	176	18 14	T-5 T-5	575-1820 475-1416
SHOCK ABSORBER Shock absorber bracket bolt nut	3/4	24	T-5	2422-4218
SPRINGS Front spring bolt nut (front) Front spring bolt nut (rear) Front spring clip nut Front spring clamp bolt nut Rear spring bolt nut (front) Rear spring bolt nut (rear) Rear spring clamp nut Rear spring clamp nut	5/8	20 20 28 18 20 20 24	T-5 T-5 110 X T-5 T-5 310 T-5 310 110 X T-5	1820-4424 1820-4424 2830-4330 575-1618 1820-3120 3120-1220 2422-4218 575-1618
STARTER Starter to cylinder screw			****	2018
STEERING GEAR Steering gear cover plate screw Steering gear adjusting screw Steering gear grease plug Steering gear support to traine bolt nut Steering gear arm nut		012 014 18 40	T-5 T-5 110X 110X	575-1618 3640
TRANSMISSION Transmission cover screws Transmission to cylinder screw Transmission reverse gear cover screw Transmission drain plug Transmission filler plug Universal joint bolt nut Transmission to flywheel housing screw	1/2	16 18 18 018 018 16 24	T-5 610 T-5 110 X T-5 T-5 T-5	1216-6116 4424-4218 2018-1318
TIRE CARRIER Tire carrier lock nut		24	500	5024
WHEELS (WOOD) Demountable rim bolt nut	34	24 22	500 T-5	5024 1220-2220
SPARK PLUG Champion	12	130	T-5	3731

Nash "Advance Six"

Owners Set

O WHEIS DEC
No. 16 — 1/2" Hex. Socket\$0.35
No. 18 $-\frac{9}{18}$ Hex. Socket
No. 20 —5/8" Hex. Socket
No. 22 — 1/8" Hex. Socket
No. 24 —¾" Hex. Socket
No. 28 —7/8" Hex. Socket
No. 30 $-\frac{15}{18}$ " Hex. Socket
No. T-4—Sliding Tee Handle
No. T-5 Q. D. Double End Offset
No. T-8—Q. D. Extension Bar
No. 500 — Dem. Rim Nut Speeder
No. 3310—Q. D. Tee Handle 1.00

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON NASH "ADVANCED SIX" CARS—MODEL 1927-1928

	Size across Flats on	Combin	nations Weld	
Part Name	Nuts	Socket	Handles 7	Type Sockets
BODY PARTS Body to frame holt nut BATTERY	34	24	T-5 110X	2224-524
Battery bracket clamp nutBRAKES	5/8	20	310	3120-1220
Front brake adjusting screw	5/8	20	T-4	1820
Front brake adjusting screw lock nut		24	T-4	2422
Front brake lever pin lock bolt		20	110X	1820
Front brake lever pin lock nut	5/8	20 18	110 X T-4	1820 575-1618
Front brake cross shaft lever bolts & nuts		24	T-4	2224-1224
Rear brake adjusting nut		14	T-4	475
Foot brake pedal adjusting nut	1111111111	22	310	3122-2422
Emergency brake adjusting nut	34	24	T-5	2422
BUMPERS		20	11037	0010 4110
Front bumper bracket to frame bolt nut	18	30 24	110X 110X	2830-4330 4218-4424
Front bumper bracket to frame bolt nut Front bumper to bracket screw	54	20	T-4	1820
Rear bumper bracket to frame screw		20	T-4	1820
Rear bumper to bracket bolt nut		28	110X	2830-4330
CARBURETOR				1318
Carburetor to heater screw		**	****	
Clutch to flywheel screws	7/8	28	T-5 110X	3830-4330
Clutch lever adjusting stud nut	18	18 18	110X 911X	575-4424 575-1218
Clutch adjusting screw	16	10	9117	3/3-1210
Differential carrier cap screw	7/8	28	T-5	1128-2830
Differential case bolt and nut	16	18	T-5	3118-1218
DISTRIBUTOR	14	10	Т-4	575-1218
Distributor lock screw nut	16	18	1-4	3/3-1210
Fan shaft nut	76	28	911X	2224-1224
Fan to generator holts	18	18	110 X	1318-1820
FENDERS			ma d	
Front fender support to frame bolt		16 16	T-5 T-4	575-1618 575-1618
Front fender to frame holts		18	T-5	575-1218
Fender to running board bolt nuts		018	210	1,1,1,1,1
FRONT AXLE	10			
Steering knuckle nut		40	110X	3640
Steering knuckle arm nut	1 18	42X 28	T-4X T-8X	2128-2224
Steering knuckle arm hall nut		28	T-5	4330-2830
Steering tie rod clevis clamp bolt nut		18	T-4	575-1618
Drag link plug			310	
GASOLINE TANK				
Gas tank strap support holt nut	16	18	310	3118-6118
Generator to motor screws	3/4	24	T-5	2224-1224
HEAD LAMP	1.5	42X	T-4X	
Head lamp stud nut		18	T-4 A	575-4424
Head lamp bracket to fender nut		10	1.4	1318
	1.0			

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON NASH "ADVANCED SIX" CARS—MODEL 1927-1928—Continued

SIX CARS—MODEL	. 1927-1920	-Contini	red	
	Size across	O.D.Wr	enches &	Wrenches
	Flats on	Comb	enches & inations Wel-	ded and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
	14 1112	FOCKER	211111111111111111111111111111111111111	1) ge soemere
HEAD LAMP				
MOTOR				
Crank shaft to flywheel bolts	24	28	T-5	1224-2224
Connecting rod holt nut	5.6	20	T-5 310	3120-1220
Connecting rod bolt nut	5.6	20	T-4	4320-1820
Cam shaft nut	182	52X	T-4X	
Call Shall flut (14" Carada assessible		24	T-6 911X	2224-1224
Cynnder nead stud nut (14 Specuci overan)	44	18	T-5	575-1618
Exhaust manifold to pipe screw	16	20	1.0	1320
Exhaust & intake manifold stud nut	3/8		310	3116-4116
Flywneel guard screws	52	16		4118-3118
lifeater to manifold screws	16	18	310	
Main bearing cap screws	39	24	T-5	2224-1224
Motor drain plug	1/9	016	210	0010 4110
Cam shaft bearing screws Cam shaft nut Cylinder head stud nut (14" Speeder overall) Exhaust manifold to pipe screw Exhaust & intake manifold stud nut Flywheel guard screws Heater to manifold screws Main bearing cap screws Motor drain plug Motor support bolt (rear) Motor support bolt (front) Motor support front bracket to frame bolt Oil pan to cylinder screws	10	30	911X	2830-4330
Motor support bolt (front)	34	24	310	3124-1224
Motor support front bracket to frame bolt	15	30	T-5	2830-4330
Oil pan to cylinder screws	1/2	16	310	3116-4116
Rear motor support bracket stud nut	34	24	110X	2422-4424
Rocker shaft bracket screw	35	16	T-4	575-1618
Rocker arm adjusting nut	16	18	T-4	575-1618
Rear motor support bracket stud nut Rocker shaft bracket screw Rocker arm adjusting nut Time gear cover screws Valve cover screws Water inlet to cylinder screws Water outlet to cylinder screws	1/2	16	T-5	6116-3116
Value cover screws	1/2	16	210	6116-2116
Water inlet to ordinder corone	9,	18	T-4	575-1618
Water outlet to cylinder screws	16	18	T-4	575-1618
MITET ED	16		- '	
MUFFLER Muffler support to exhaust pipe bolt	_9_	18	T-5	575-3118
Munier support to exhaust pipe boit	16	16	T-5	475-1216
Muffler support to frame bolt	72	14	T-5	475-1214
Munier tail pipe support bolt	1.0	14	1 -3	4/J-1214
RADIATOR	1.5	7.0	T-5	2830-4330
Radiator stud nut		30	1-3	2030-4330
REAR AXLE	1/	17	210 T-5	2116-6116
Rear axle cover screws	1/2	16	210 1-5	
Rear axle drain plug	20	018	T-5 210	
Rear axle filler plug	7/8	028	T-5 911 X	2216
Rear axle pinion lock screw	1/2	16	T-4	2216
Rear axle shaft housing to D. S. housing scree	w 3/4	24	911X	2224-3124
Rear axle shaft nut	1 1/4	40	110X	3640
Universal joint bolts	5.6	20	T-5	4320-1820
REAR AXLE Rear axle cover screws Rear axle filler plug Rear axle pinion lock screw Rear axle shaft housing to D. S. housing scre Rear axle shaft nut Universal joint bolts Drive shaft pinion nut RUNNING BOARD	1 3/8	44 X	T-4X	
RUNNING BOARD				
Running board to support bolt nut	10	018	210	
SHOCK ABSORBERS				
Shock absorber clamp to axle bolt nut	3/1	24	T-5 310	3124-2422
SPRINGS				
Front spring shackle bolt nut	15	30	911X	2830-4330
Front spring clip nut		31	T-5	
Rear spring shackle bolt nut (rear)	18	30	T-5 911X	2830-4330
Rear spring shackle bolt nut (front)	1	32	T-5 911X	3432
Front spring clip nut Rear spring shackle bolt nut (rear) Rear spring shackle bolt nut (front) Rear spring clip nut Spring clamp bolt nut	8.1°	31	T-5	
Spring clamp bolt nut	1/2	16	T-4	475-575
STARTER	/ =			
Starter to motor screw	5/8	20	T-5 911X	2220-1220
STEERING GEAR	, ,			
C	3/4	24	110X	4218-1124
Steering gear housing to post clamp bolt	17	16	T-4	575-1618
Steering gear case to frame holts	3/1	24	911X	2422-1124
Steering gear case alamp holt nut	52	20	T-4	1820-144
Steering gear case clamp bott fitt	78	18	T-4	575-4218
Steering gear worm aujusting screw	110	46X	T-4X	
Steering gear post to coul breaket	176	018	T-4	
Steering gear housing stud nuts Steering gear housing to post clamp bolt Steering gear case to frame bolts Steering gear case clamp bolt nut Steering gear worm adjusting screw Steering gear arm nut Steering gear post to cowl bracket TIRE CARRIER	16	018	1 -4	
Tire carrier put				
Tire carrier nut 1 to R. S. used on model 360 only 1 to L. S. all other models 1 to	1.5	42X	T-4X T-82	r
1 I S all other models 1.1	1 1	42.X 34	T-5	1003-3432
TRANSMISSION	, 1 18	34	1-3	1003-3432
TRANSMISSION Transmission to motor screw	9	18	T-5	6116 2210
Transmission to motor screw	16			6116-2218
Transmission rear brasing cover cores	/2	16	T-5-310 T-4	4116-3116
Transmission cover screws Transmission rear bearing cover screw Transmission counter shalt nut Transmission brake band bracket nut	12/	16 44 X		575-1316
Transmission beaks hand breaket not	1 3/8	44.1	T-4 X	1210
Transmission band area of the control of the contro	10	24	T-5	1318
transmission pand support stud nut	4	24	T-5 T-4	1124-4218
Transmission drum to universal joint bolt	7.0	14		475-1316
Transmission drain plug	16	018	T-4	
Transmission filler plug	16	018	T-4	
WHEELS		0.	#0.0	1004
Disc wheel stud nut	3/4	24	500	5024

Nash "Special Six"

Owners Set

No. 16 — 1/2" Hex. Socket\$0.	35
No. 18 $-\frac{9}{16}$ " Hex. Socket	35
110. 20 /0 110111 2001100 111111111111111111	35
140. 22 10 12221 2001100 71111	35
No. 24 —3/4" Hex. Socket	45
	45
	55
No. T-4-Sliding Tee Handle	75
No. T-5—O. D. Double End Offset	75
No. T-8 -O. D. Extension Bar	70
No. 500 —Dem. Rim Nut Speeder	20
No. 3310—Q. D. Tee Handle 1.	
	05

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON NASH "SPECIAL CARS—MODEL 1927-1928

CARS—MODEL 1927-1920					
	Size across	Q.D. Wret	iches &	Wrenches	
	Flats on		ations Weld		
D V	Nuts			Type Sockets	
Part Name	Auts	MUCKEL	Transities 1	ype Bockers	
BODY PARTS	17	24 T	2 T-5 110 X	524-4218	
Body to frame bolt nut					
Battery clamp bolt nuts	· · · · · · · · · · · · · · · · · · ·	14	310	3114-1214	
Front brake adjusting screw nut	16	16	T-4	1416	
Front brake adjusting screw	1/6	16	T-4	1416	
Front brake anchor screws		24	T-5	4818-2224	
Front brake lever bracket bolt		18	110X	575-1618	
		18	110X	575-1618	
Front brake lever nut		18	T-4	575-1618	
Brake cross shaft lever holt and nuts		24	T-5	4218-1124	
Rear brake adjusting nut	79	14	T-5	475-1416	
Rear brake band support screw	19				
Foot brake pedal adjusting nut BUMPERS	18	22	310	4330-1222	
Front bumper bracket to frame bolt nut	7/8	28	T-5	2830-4330	
Front humper bracket to frame holt nut	18	30	T-5	4330-2830	
Front bumper bracket to frame clamp screw		18	T-5	575-2216	
Front bumper to bracket screw	5/8	20	911X	1820-4320	
Rear bumper to bracket bolt nut	5/8	20	110X	1820-4320	
CARBURETOR	/ •				
Carburetor to heater screw	2			1318	
CLUTCH	10			2010	
Clutch lever adjusting stud nut	.0.	18	110 X	575-1820	
Clutch lever adjusting screw	30	18	110X	575-1820	
Clitten lever adjusting screw	3/	24	110X	1224-2422	
Clutch to flywheel screw	44	24	1102	1224-2432	
DISTRIBUTOR Distributor lock screw nut	0	18	T-4	575-1618	
	16	10	1-4	3/3-1019	
DIFFERENTIAL	11	22	T-5	2422 2220	
Differential carrier cap screw	18			2422-2220	
Differential case screw	/8	28	T-5 110X	2830-1224	
FAN	.,				
Fan adjusting stud nut FENDERS	3/4	24	110X	4218-2224	
Front fender support to frame holt	2	18	T'-5	575-1618	
Front fender to frame bolt		16	110X	575-3116	
Rear fender to body screw		18	T-5	575-1216	
Rear fender to shield nut		14	610	6114-475	
Fender to run board bolt		18	T-4 210	2118-575	
FRONT AXLE					
Steering knuckle nut	1 1/4	40	110X	3640	
Steering knuckle arm nut		42X	T-4X T-8X		
Steering knuckle arm ball nut	7/8	28	911X	2830-4330	
Steering tie rod clevis bolt nut	1	32	911X	3432	
Steering tie rod clevis clamp bolt		18	T-4	575-1618	
Drag link plug	1 1/8	T-1 1/8	310		
GASOLINE TANK					
Gas tank strap bolt nuts	26	18	310	3118-6118	
GENERATOR					
Generator to bracket screw	%	18	911X	575-1218	
Generator adjusting bracket to cylinder nut		20	T-5	1218-1220	

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON NASH "SPECIAL SIX" CARS-MODEL 1927-1928-Continued

Part Name	Size across Flats on Nuts	Q.D.Wren Combina Socket	ations Wele	Wrenches led and Fixed Type Sockets
HEAD LAMP Head lamp stud nut Head lamp bracket to fender nut	76	28	110X	2830-2224
MOTOR		18	T-5	
Cam shaft nut Cam shaft bearing screw Connecting rod cap bolt nut	176	46X 20	T-4 X T-4	1820-4320
Connecting rod cap holt nut	5/8 7/8	20 28	T-5 310 T-5	3120-2220 2224-1224
Crank shait to flywheel stud nut Cylinder head stud nut Exhaust manifold to pipe screw	3/4	24	T-5 614 T-4	6124-2224 575-1618
Exhaust and intake manifold stud nut	5/8	18 20	T-4 310	3120-1620
Flywheel guard screw Heater to manifold screw	1/2	16 18	310 T-4	3116-575 575-1618
Heater to manifold screw Main bearing stud nut Motor drain plug		24 016	T-5 210	1224-2224
Motor support bolt (rear) Motor support bolt (front) Oil pan to cylinder bolt Rocker shaft bracket screw Rocker arm adjusting nut	118	34 24	T-6 911X 911X	1003-3432 1224-2224
Oil pan to cylinder bolt	1/2	16	310	3116-4116
Rocker shaft bracket screw	1/2	16 18	T-5 T-5	575-1416 575-2216
Time gear cover screw	1/2	16 16	T-5 210	6116-3116 2116-6116
Time gear cover screw Valve cover screw Water outlet cylinder screw	1/2	16	T-4	575-2214
MUFFLER Front muffler support to exhaust pipe screw	%	18	110X	575-3118
Rear muffler support to exhaust pipe screw Front muffler support to frame bolt	1/2 $1/6$	16 14	110 X 310	575-1416 3114-4114
Muffler tail pipe support bolt	· · · · · · · · · · · · · · · · · · ·	14	110X	4114-475
Radiator stud nut	31	31	911X	
Rear axle cover screws Rear axle drain plug Rear axle filler plug Rear axle pinion lock screw	5/8	20 712	911X T-4	3120-6120
Rear axle filler plug	13	020	T-4 T-4	
Rear axle shaft nut	1.	01 7 40	110 X	3640
Drive shaft pinion nut	1 1/4	44 X 24	T-4X 110X	2422-4218
Universal joint bolt	5/8	20	110X	2422-4218
Running board to support nut SHOCK ABSORBERS	re	018	210	
Shock absorber clamp bolt nut	5/8	20	T-4	4320-1820
Front spring shackle bolt nut (front)	1 1/4	40 34	110X 110X	3640 1003-3432
Front spring clip nut	178	31	911X	
Rear spring shackle bolt nut (rear) Rear spring shackle bolt nut (front)	1 16	34 34	T-5 110X	1003-3432 1003-3432
Front spring shackle bolt nut (front) Front spring shackle bolt nut (rear) Front spring clip nut Rear spring shackle bolt nut (rear) Rear spring shackle bolt nut (front) Rear spring clip Spring clamp bolt nut STARTER	31	31 16	911X T-5	575-2216
STARTER Starter to motor screw		20	911X	1218-1220
STEERING GEAR Steering gear case clamp bolt		20	Т-4	1220-1218
Steering gear housing to post clamp bolt nut Steering gear case to frame bolt nut	1/2	16	T-4	575-1618
Steering gear case clamp bolt nut	1/2	20 16	T-5 T-4	1120-1218 575-1416
Steering gear worm adjusting screw Steering gear arm nut	1 %	18 46 X	T-4 T-4X	575-1618
TIRE CARRIER Tire carrier bracket nut		34	911X	1003-3432
Transmission to motor screw		18	T-5	6118-1118
Transmission cover screw Transmission rear bearing cover screws	1/2	16	310	6116-3116 1318
Transmission brake band bracket nut	3/4	24 24	T-5 T-5	4424-4218 4424-4218
Transmission counter shaft nut	13/8	44 X 016	T-4X T-4	
Transmission brake band bracket nut. Transmission rake band support stud nut Transmission counter shaft nut Transmission drain plug Transmission brake adjusting nut WHIFILS	1/2	016 24	210 T-6 911 X	4218-2422
WIIEEIM		24	500	
Disc wheel stud nut	94	24	300	5024

Oakland "All American Six"

Owners Set

No. 16 —1/2" Hex. Socket\$0.35
No. 18 $-\frac{9}{16}$ " Hex. Socket
No. 19 — Hex. Socket
No. 20 —5/8" Hex. Socket
No. 22 — 16" Hex. Socket
No. 24 — 4" Hex. Socket
No. 28 — 7/8" Hex. Socket
No. 30 — 18" Hex. Socket
No. T-4—Sliding Tee Handle
No. T-5 -Q. D. Double End Offset
No. T-8-Q. D. Extension Bar
No. 500 — Dem. Rim Nut Speeder 1.20
No. 3310—Q. D. Tee Handle 1.00

\$7.60

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON OAKLAND "ALL AMERICAN SIX" CARS—MODEL 1927-1928

AMERICAN SIA CA	KS-MOD.	LI 1901-1.	,20	
	Size across Flats on Nuts		nations Weld	Wrenches led and Fixed Type Sockets
Part Name	Nuts	Socket	Handies .	Type Buckers
BODY PARTS		0.0	(D = (D a	500 0000
Body to frame bolt nut	· · · · · · · · · · · · · · · · · · ·	22 22	T-5 T-2 T-5	522-2220 2422
Dash to frame bolt nut	· · · 18	44	1-5	2422
BATTERY	_,	1.0	T-4	475-1216
Battery box clamp bolt nut	1/2	16	1 -4	4/3-1210
BRAKES		00	T-5 911X	2224-2830
Front brake adjusting nut	3/8	28 28	T-5 911X	2224-2830
Rear brake adjusting nut	/8	40	1-3 71174	2224-2030
BUMPERS	0	18	T-5	575-2218
Rumper bracket to frame bolt		24	T-5	4424-4218
Bumper bracket to frame nut		32	T-4	3432
Rear humper to frame	11.11	22	T-5	2220-2422
CLUTCH	19			
Clutch to flywheel stud nut	3/1	24	T-5	1224-4218
Clutch pedal bracket clamp nut		22	T-4	2220-2422
Clutch pedal bracket clamp bolt		012	T-4	
Clutch plate housing stud nut		20	T-5	2220-1120
FAN				
Fan bracket to cylinder screw	10		****	1318
FENDERS				
Front fender support to frame holt nut	20	18	T-5	575-1820
Fender to running board bolt	Ye.	014	T-5	
Rear fender to body screw	1/2	16	Т-5 610	6116-575
FRONT AXLE				
Steering knuckle nut	1 1/4	40	T-5	3640
Steering knuckle arm nut		34 44 X	T-5 T-4 X	1003-3432
Steering lever nut	1.3%	T-1	T-4	
Steering rod end plug	1	T-1	310	
			0.0	
GASOLINE TANK Gas tank support strap nut	9.	18	T-4	575-1820
	16	10		0.0
GENERATOR Generator to bracket bolt nut	1/2	16	T-4	1316-575
HEAD LAMP	/2	10		1010 010
Head lamp bracket to fender bolt nut	19	19	T-5	1119
Head lamp stud nut		24	T-5 110X	4218-2422
Tail lamp bracket to frame nut	1/2	16	T-5	575-2216
MOTOR				
Cam shaft to gear cap screw	16	18	110X	1820-4218
Connecting rod bolt nut		18	T-5	575-1216
Cylinder to crank case screws		18	T-5 210	2118-2218
Exhaust manifold to cylinder stud nut		20	T-5	1120-1320
Exhaust manifold to pipe screws		18 20	T-5 110X	575-1318 2220-1820
Flywheel to crank shaft bolts		16	T-5	475-2216
Heater to exhaust manifold screws		18	T-5 210	575-2218
Tienter to exhaust mannere serews	10			

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON OAKLAND "ALL AMERICAN SIX" CARS—MODEL 1927-1928—Continued

MADRIONN BIA CARD	Si		0	W
	Flats on	s Q.D.Wrei Combin		Wrenches lded and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
		22		
Cylinder head stud nuts	· · · · }}	22	T-5 610	6122-2422 2422-1122
Main bearing stud nuts	18	016	110X T-5	2422-1122
Motor drain plug Motor support bolt (front and rear)	1/2	28	T-5	2830-4330
Motor support bolt (front and rear)	7/8	30	T-5	2830-4330
		014	T-5 210	2030-4330
Engine pan to frame bolt	7	14	T-4	1114-475
Timer clamp screw	· · · · · · · · · · · · · · · · · · ·	16	T-5 610	575-6116
Tutal-a manifold to solid an atual and	5/8	20	T-5	1218-1120
Intake manifold to cylinder stud nut		14	T-4	475-1416
Oil pump to case screw	16	20	T-5	1820-1120
Oil pump to case screws Oil regulator body Water outlet connection to cylinder screws Winter adjusting plate on exhaust manifold	98	18	T-5	575-1820
Water outlet connection to evlinder corews	5.6	20	T-5	1120-1220
Winter adjusting plate on exhaust manifold	1/2	16	T-5	575-1116
MUFFLER	/2			
	0	18	T-5	575-1218
Muffler support bolt nut	16	10	1.3	3/3-1210
RADIATOR				2222 1212
Radiator support stud nut	}}	22	T-6 110X	2220-1218
REAR AXLE		016	010	
Rear axle drain plug	1/3	016	-210	
Rear axle filler plug Rear axle drive pinion nut	1/2	016	T-5	
Rear axle drive pinion nut	1 1'6	38X	T-4X	575 2110
Rear axle housing cover screws Rear axle housing cover screws (front)	16	18	T-5 610 T-5	575-3118
Rear axle housing cover screws (front)	16	18	T-5	575-1820
Rear axle pinion adjusting lock screw	16	18	T-4X	575-1820
Rear axle shaft nut	1 16	46X 24	T-5	2422-4218
Differential bearing clamp stud nut	9/4	18	T-5	575-1318
Universal joint coupling bolts	· · · · TG	18	T-5	575-1318
Rear axle pinion adjusting lock screw Rear axle shaft nut Differential bearing clamp stud nut Universal joint coupling bolts Universal joint bolt nuts	· · · · 16	10	1 -3	373-1310
RUNNING BOARD			*** * *	
Running board to support bolt nut	· · · · 7'd	014	T-15	
SPRINGS				
Front spring shackle bolt	34	24	T-4	2422-4424
Front spring shackle holt nut	12	30	110 X	2830-4330
Front spring clip nut Front spring clamp bolt nut Rear spring shackle bolt (rear)	3/4	24	911X	1124-2422
Front spring clamp bolt nut	36	16	T-5	575-1316
Rear spring shackle bolt (rear)	3/4	24	T-5	2422-4424
Rear spring shackle holt nut (rear)	18	30	110X	2830-4330
Rear spring shackle bolt (front)	7/8	28	T-4	2830-4330
Rear spring shackle bolt nut (front)	1) 6	34	1111	
Rear spring clip nut	34	24	911X	1124-2422
Rear spring shackle bolt nut (rear) Rear spring shackle bolt (front) Rear spring shackle bolt nut (front) Rear spring clip nut Rear spring clamp bolt nut	1/2	16	T-5	575-1316
STARTER				
Starter cable nut	56	20	T-5	1120-1820
STEERING GEAR				
Steering gear case cover screws	Vs	16	T-4	1316-1618
Steering gear housing clamp screw	1/2	16	T-5	475-1618
Steering gear housing supt, to frame cap screw.	5/8	20	T-5	1120-1218
Steering gear housing supt. to frame cap screw. Steering gear post clamp bolt nut	1/2	16	T-5	575-2216
Steer, post to instru, board bracket clamp screen	ew . 1/2	16	T-5 T-5	575-1316
Filler plug		014	T-5	
TIRE CARRIER				
Tire carrier bracket to frame bolt nut	3/5	16	T-5	1216-575
Tire carrier lock nut	34	24	500	5024
Tire carrier lock nut Side carrier rod to body nut	34	24	T-5	2422-4218
Side carrier rod to fender	1.8	19	T-5	1119
TRANSMISSION				
Transmission cover screws (front)	1/2	16	T-5 610	1316-6116
Transmission cover screws (rear)	5/8	20	T-5	1820-4320
Transmission case to cylinder can screw	78	18	110X	2216-1618
Transmission case to cylinder cap screw Transmission drain plug Transmission filler plug Transmission rear bearing cover screw	1/2	016	T-5 310	2210-1010
Transmission filler plug	1/,	016	T-5 310	
Transmission rear bearing cover screw	5/g	20	T-5	1820-4424
Transmission brake to universal coupl, holt		18	Τ-4	1618-1820
Transmission brake band lever rack screw	1/2	16	T-5	575-1416
Transmission brake band lever stud nut	34	24	T-5	2423-2224
Transmission brake to universal coupl. bolt Transmission brake band lever rack screw Transmission brake band lever stud nut Transmission housing to cylinder screw	16	18	T-5	1618-1820
WHEELS (WOOD)	40			
WHEELS (WOOD) Front wheel hub bolt nut Rear wheel hub bolt nut Demountable rim bolt nut	&	18	T-5	575-1218
Rear wheel hub bolt nut	, , , , , , , , , , , , , , , , , , ,	18	T-5	575-1218
Demountable rim bolt nut	3/4	24	500	5024

Oldsmobile "Six"

Owners Set

No.	16	I/2'	Hex.	Socket						 	 	 	\$0.35
No.	18	-16	Hex.	Socket					 	 	 	 	.35
No.	20	5/8'	Hex.	Socket				. ,	 	 	 	 	.35
No.	24	-3/4'	Hex.	Socket					 		 	 	.45
No.	32	—1"	Hex. S	Socket					 	 		 	.55
No.	T-4	4 — Sli	ding T	ee Han	dle				 	 		 	.75
No.	T-5	5 - Q.	D. Do	uble Er	id C)ffs	et		 	 		 	.75
				tension									
				ı Nut S									
No.	331	0-Q.	D. Tee	e Handl	е				 	 		 	1.00
													Q6 15

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON OLDSMOBILE "SIX" CARS-MODEL 1927-1928

Size across Q.D.V	
	nbinations Welded and Fixed Handles Type Sockets
BODY PARTS Body to frame bolt nut	T-2 T-5 310 524-4218
BATTERY Battery clamp nut	T-4 2018-1618
BRAKES Front brake adjusting cam lock nut	110X 2422-4422
Front brake adjusting screw 34 24 Front brake anchor bolt 76 28 Front brake cross shaft bracket bolt 1/2 16 Front brake lever arm to brake clamp bolt nut 34 24 Rear brake adjusting nut 16 18 Rear cross shaft bracket bolt 1/2 16	110 X 4218-2422 110 X 2830-4330 T-4 575-1316 110 X 2422-4218 T-5 575-1820 T-5 575-1316
Rear cross shaft lever bolt	T-5 575-1316
Front bumper bracket to frame screw 26 Front bumper to bracket nut 26 Rear bumper to bracket to frame screw 26 Rear bumper to bracket screw 30 Rear bumper to bracket screw 30 26	110X 110X 110X 110X 110X
CARBURETOR Carburetor to intake manifold screw	1316
CLUTCH Clutch pedal adjusting clamp bolt nut ½ 16	T-4 475-1316
DISTRIBUTOR Distributor bolt lock nut	T-5 575-1216 110X 575-1214
FAN Fan blade nut	Т-4 475-1416
FENDERS Front fender support to frame bolt 1/2 16 Front fender to frame bolt nut 014 Front fender to run board bolt nut 1/2 014 Rear fender to body screw 1/4 16	110 X 575-1518 310 T-5 610 575-6116
FRONT AXLE Steering knuckle spindle nut 1½ 40 Steering drag link plug 1 T-1 Steering tie rod drag link plug 1 T-1	110 X 3640 T-4 310 T-4 310
GASOLINE TANK Gas tank drain plug 7 014 Gas pump feed screw ½ 16	T-5 T-5 575-1618
GENERATOR Generator to motor screw	T-8 110X 575-1218

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON OLDSMOBILE "SIX" CARS—MODEL 1927-1928—Continued

CAKS—MODEL	1927-1920-	Continued		
	Size across	Q.D.Wre	nches &	Wrenches
	Flats on		nations We	lded and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
	14000	DOCKEL	Trandics	Type Dockets
HEAD LAMP				
Head lamp stud nut	7/8	28	110X	2830-4330
Head lamp bracket to fender nut		14	110X	475 1416
MOTOR				
Connecting rod stud nut	.0	18	310	3118-1216
Cylinder front cover screw	16	16	T-5 310	3116-1214
Cylinder head cap screw	9/8	20		10 620-2220
Exhaust manifold to pipe bolt & nut	16	18	110X	575-1618
Exhaust manifold stud nut	10	18	310	4118-2018
Intake manifold stud nut		18	310 575	4118-2018
Motor support bolt nut (front)	3/4	24	T-5 310	3124-1224
Motor support bolt nut (rear)	15	30	310	3130*
Motor support holt (rear)	7/8	28	110X	2830-4330
Motor support bolt (rear)	1	. 3.2	210 110X	3432
Oil pan to motor cap screw	1.6	16	310	1216-4116
W !- 1		16	310	575-3116
Water jacket screw			T-5	575-3118
Water outlet connection screw		18		
Oil filter adjusting screw	1/2	14	T-4	474-1416
Flywheel cover screw	1/2	16	310	3116-4116
MUFFLER				
Muffler bracket to frame bolt nut	9.	18	T-5	575-1618
	16	147	1-5	373 1010
RADIATOR				
Radiator to frame stud nut		26	310	
REAR AXLE				
	1/	24	110X	2224-4218
Differential carrier cap screw				
Differential carrier clamp bolt	· · · · · · · · · · · · · · · · · · ·	18	T-5	575-1820
Propeller shaft coupling bolt nut	16	18	110X	575-2018
Rear axle housing cover nut	16	18	T-5 310	3118-1820
Rear axle shaft nut	1%	46 X	T-4X	
RUNNING BOARD				
	.7.	014	T-5	
Running board to support holt nut	3.9	017	1-2	
SPRINGS				
Front spring clamp bolt nut	I/2	16	T-4	475-1416
Front spring clip nut	3/1	.24	110X	2422-4218
Front spring shackle holt nut (front)	15	30	110X	2830-4330
Front spring shackle bolt nut (front) Front spring shackle clamp bolt (rear)	9	18	110X	575-1820
Profit spring shackle clamp bott (rear)	16	16	T-4	475-1416
Rear spring clamp bolt nut			110X	2422-4218
Rear spring clip nut		24		
Rear spring shackle holt nut (front)	15	30	110 X	2830-4330
Rear spring shackle holt nut (front) Rear spring shackle clamp holt (rear)	1	18	110X	575-1820
Front and rear spring clamp holt nut	9	18	110 X	575-2018
STARTER	1.0			2018
Starter to motor cap screw	98			2010
STEERING GEAR				
Steering gear clamp bolt nut	1/2	16	T-5	575-1618
Steering gear clamp bott nut	46	24	T-5	4218-4424
Steering gear lock screw	200	18	√T-5	575-1820
Steering gear support screw	10		T-4	575-1618
Steering post bracket to cowl bolt nut	1/2	16		3640
Steering arm sector nut	134	40	110X	3040
TIRE CARRIER	9	18	T-5 310	3118-1218
Tire carrier bracket to frame bolt		24	500	5024
Tire carrier lock nut		24	300	3047
TRANSMISSION				
	3/4	24	T-5	2422-4218
Brake quadrant transmission screw	54	20	T-4	1820-2018
Propeller shaft coupling bolt nut (front)	**** 9/8	24	110X	4424-4218
Transmission case to motor screw	9/4			
Transmission cover screw	· · · · 16	18	310	3118-1218
Transmission drain plug	36	016	T-5	
Transmission filler plug		016	310	
Transmission rear plate screw	1/2	4.4		1316
WHEELS (WOOD)		0.4	500	2024
Demountable rim nut	28	24	500	5024

Overland-Whippet Four

Owners Set

No. 16 —½" Hex. Socket	\$0.35
No. 18 — 16" Hex. Socket	35
No. 20 — 1/8" Hex. Socket	35
No. 22 —] b" Hex. Socket	35
No. 24 —3/4" Hex. Socket	.45
No. 28 — 7/8" Hex. Socket	45
No. T-4—Sliding Tee Handle	75
No. 500 —Q. D. Brace Handle	1.20
No. T-5 $-\tilde{Q}$. D. Double End Offset	
No. 3310—O. D. Tee Handle	
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	\$6.00

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON OVERLAND-WHIPPET FOUR CARS-YEAR 1927-1928

Part Name	Size across Flats on Nuts	Q.D.Wrei Combin Socket	ations Weld	Wrenches ed and Fixed Type Sockets
BODY PARTS Body to frame bolt nut		22 28	T-2 310 110X	522-2422 2830-4330
BRAKES Brake band adjusting nut Brake band support nut Brake rod lever screw Brake countershaft bracket screw	1/2	24 19 16 18	110 X 110 X T-5 T-5	4218-4424 1119 575-1618 575-2018
BUMPERS Bumper to frame nut (rear) Bumper to frame nut (front) Bumper front clamp screw	16	20 18 32	T-5 T-5 110X	1820-4424 1618-4218 3432
CLUTCH Clutch to flywheel screw	16	22 18	T-5 T-5	1220-2220 575-2018
DISTRIBUTOR Distributor clamp screw	_Y z	14	T-5	475-1416
FAN Fan and water pump cap screw	1/2	16	T-5	575-1316
FENDERS Front fender bracket to frame bolt Front fender to frame bolt Rear fender to body screw Fender to running board bolt nut	1/2	16 16 16 016	T-5 T-5 T-2 610 T-5	575-1618 1216-4424 616-575
FRONT AXLE Steering arm nut Steering knuckle nut Steering knuckle tie rod bolt nut Drag link plug	11/4	36 40 18 T-1	110X 110X F-5 310	3640 3640 575-2018
GASOLINE TANK Gas tank drain plug	7/8	28	110X	2830-4330
GENERATOR Generator mounting bolt nut	ya	18	T -5	1218-575
HEAD LAMP Head lamp bracket to fender bolt Head lamp tie rod bolt Head lamp stud nut	1/2	18 16 22	T-5 T-5 110X	575-2018 475-1618 2422-4330
MOTOR Motor drain plug Motor spark plug Connecting rod stud nut Cylinder head screw Motor support bolt (front)	1 1/8	36 136 18 20 24	110 X 110 X 310 T-6 T-5 610 110 X	3640 3118-1218 1218-2220 4424-2422

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON OVERLAND-WHIPPET FOUR CARS—YEAR 1927-1928—Continued

	Size across Flats on	Q.D.Wren Combina		Wrenches ded and Fixed
Part Name Motor support bolt (rear) Main bearing cap screw Oil pan screw Timing gear cover screw Oil pump to motor screw Exhaust manifold to pipe screw Exhaust and intake manifold stud nut Water inlet to cylinder screw Water outlet to motor screw Intake to exhaust menifold stud Drip pan nut		Socket 16 28 16 16 16 18 18 18 18 18	Handles T-5 310 310 310 T-5 110X T-5 310 T-5 T-5 T-5	Type Sockets 1216-1618 3128-2224 3116-6116 3116-6116 575-1618 575-2018 3118-1216 575-2018 575-1618 475-1618
MUFFLER Muffler to bracket bolt Muffler bracket to frame bolt	9	18 18	T-5 T-5	575-2018 1618-2018
PROPELLER SHAFT Nuts on universal	½	16	T-5	475-1316
RADIATOR Radiator stud nut Radiator shell to core nut	3/4	24 16	110X T-5	1224-2422 575-1618
REAR AXLE Rear axle drain plug Rear axle filler plug Rear axle housing bolt Rear axle shaft nut Rear axle drive shaft housing screws	18 13/8	714 030 18 44X 18	T-4 110 X T-5 310 T-4 X T-5	3118-6118 1820-1318
RUNNING BOARD Running board to bracket bolt nut		14 16	T-5 T-5	475-1416 475-1618
SPRINGS Front spring frame holt nut Front spring shackle bolt nut Front spring clip nut Rear spring frame bolt nut Rear spring shackle bolt nut Rear spring clip nut Rebound clamp nut	7/8 7/8 7/8	28 28 20 28 28 20 16	110 X 110 X 110 X 110 X 110 X 110 X 1-5	2830-4330 2830-4330 144-4424 2830-4330 2830-4330 144-4424 475-1316
STARTER Mounting bolt nut	10	18	T-5	1218-575
STEERING GEAR Steering gear arm nut Steering gear support to frame bolt Steering gear to post coupling clamp bolt Steering gear support clamp bolt	5/8	48X 18 20 24	T-4X T-9X T-5 T-5 110X	575-1618 1820-2018 2422-4424
TRANSMISSION Transmission drain plug	½ ½ ½	016 016 16 16	T-4 T-5 T-5 310 T-5 T-5	3116-6116 1618-4424 1119
WHEELS (WOOD) Hub nut Rim nut		22 24	T-5 500	1220-2220 5024 .

"Packard Six"

Owners Set

No. 14 $-\frac{7}{16}$ " Hex. Socket	\$0.35
No. 16 — 1/2" Hex. Socket	
No. 18 — 16" Hex. Socket	.35
No. 20 —¾" Hex. Socket	.35
No. 24 —3/4" Hex. Socket	
No. 28 —7/8" Hex. Socket	
No. 30 — 18" Hex. Socket	
No. 024 —3/4" Sq. Socket	
No. T-4—Sliding Tee Handle	.75
No. T-5—Q. D. Double End Offset	.75
No. T-8-Q. D. Extension Bar	.70
No. 500 — Dem. Rim Nut Speeder	
No. 3310—Q. D. Tee Handle	1.00
	00.50

\$7.80

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON PACKARD "SIX" CARS—MODEL 1927-1928

	Size across Flats on			Wrenches led and Fixed
Part Name	Nuts	Socket		Type Sockets
		1707CTCL		A J I'VE COUNCES
BODY PARTS Body to frame bolt nut	5/.	20	T-5 T-2 310	144-4224
BATTERY	78	20	1-5 1-2 510	177-7227
Battery box to frame holt nut	Jr	14	210	1416-2114
Battery box clamp screw		18	210	1618-2118
BRAKES				
Front brake adjusting cam nut		24	110X	1124-4218
Front brake cable adjusting nut	3/4	24	110X	1124-2422
Front brake shoe anchor pin nut		24	110X 110X	4218-4424
Front brake shoe anchor pin nut		28 18	T-5	122 4-2224 575-2216
Front brake operating shaft bracket to frame bol		16	T-4	575-2214
Rear brake anchor pin nut		28	110X	2224-2830
Rear brake adjusting cam nut		24	110X	1124-2422
Brake lever clamp bolt nut		16	T-5	575-1316
Hand brake stud nut		24	110X	4424-2422
Hand brake adjusting stud nut	34	24	110 X	4424-2224
Rear huh flange screw	5%	20	T'-5	4424-1820
BUMPERS	9	18	110X	575-1820
Front humper bracket to frame holt	7/8	28	110X	2830-4330
Rear humper to bracket screw		18	110X	575-1820
Rear bumper to bracket screw	74	28	110X	2830-4330
CARBURETOR				
Carburetor to manifold screw (outside only)	16	18	T-5	1320
Carburetor bowl assembly screw	1 1/8	36	110X	3640
CLUTCH	9	18	T-5	575-1618
Clutch pedal adjusting bolt nut	16	18	71-5	575-1618
Clutch to flywheel cap screw	18	18	T-2 310	518-1218
FAN	10	10	2 2 0 2 0	310 1210
Fan blade nut	1/2			1316
FENDERS	7/	16	110X	575-1416
Front fender support to frame holt	1/2	14	T-4	475-1416
Front fender to frame bolt		14	T-4	475-1416
Front fender to running board bolt nut		16	T-5	475-1316
Rear fender to body screw		16	T-5	475-2214
FRONT AXLE				
Steering knuckle spindle nut		60 X X	T-4 X X	
Steering knuckle arm ball nut		28 28	110X 110X	2224-2830
Steering tie rod ball stud nut		28 16	T-5	2224-2830 575-1416
GASOLINE TANK	72	10	1-3	3/3-1410
Gas tank support bolt nut (front)	1/2	16	610	575-6116
Gas tank support bolt nut (rear)		20	T-5	2018
Gas tank drain screw		18	T-4	575-1618

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON PACKARD "SIX" CARS—MODEL 1927-1928—Continued

CARS-MODEL	1927-1928	Continued		
	Size across	Q.D.Wre	nches &	Wrenches
	Flats on			ded and Fixed
David Manna	Nuts	Socket		Type Sockets
Part Name	77.002	SOURCE	riandics	type Sockets
HEAD LAMP				
Head lamp stud nut	13	30	110X	2830-4330
Head lamp bracket to fender bolt nut	7/6	28	T-4	1224-2224
MOTOR			•	
Com shaft many mut	1.2/	44X	T-4 X	
Cam shaft gear nut Connecting rod bolt nut Cylinder head stud nut	1 4/8		310	3114-1214
Connecting rod bolt nut	16	. 14		
Cylinder head stud nut	5/8	20	T-5	2220-6120
Exhaust manifold to cylinder stud nut	1/2			1316
Exhaust manifold to pipe bolt nut	· · · · · · · · · · · · · · · · · · ·			1318
Intake manifold to cylinder stud nut	i/2			1316
Flywheel to crank shaft bolt nut	3/.	24	T-2 310	524-1224
Main bearing stud nut		20	310 110X	3120-2220
Main bearing stud nut				475-4114
Motor cylinder water jacket plate screw Motor support bolt (front) Motor support bolt (rear)	· · · · · · · · · · · · · · · · · · ·	14	610	
Motor support bolt (front)	16	18	T-4	575-1618
Motor support bolt (rear)	18	**	4.4.4	1318
		14	310	475-3114
Oil drain plug	34	024	110X	
Oil drain plate stud nut	1/2	16	210	575-2116
Oil non to pulinder series	/2	16	310	3116-4116
Oil files to cylinder screw			T-5	575-1316
Oil filler to motor screw	1/2	16	1.3	
Oil drain plus Oil drain plus Oil drain plate stud nut Oil pan to cylinder screw Oil filler to motor screw Push rod crab stud nut Rocker shaft cover stud nut	16	5.5		2018
Rocker shaft cover stud nut	1/2	16	T'-4 610	1416-6116
liming chain inspection hole screw		024	T-4	
Timing gear cover screw	1/4	16	T-5 610	1416-6116
Water nume to culinder stud nut	1/2	16	110X	1316-1618
Timing gear cover screw Water pump to cylinder stud nut Water inlet manifold to cylinder screw			T-5	575-1416
water inlet manifold to cylinder screw	1/2	16	1-5	3/3-1410
MUFFLER				
Muffler to bracket bolt nut	1/2	16	T-5	575-1116
RADIATOR				
Radiator stud nut	18	30	110X	2830-4330
REAR AXLE	10			=000 1000
	3/.	24	T-5	4218-4224
Differential drive pinion bearing sleeve lock n	1111 9/4			
Differential ring gear to case bolt and nut	16	18	110 X	1618-4218
Differential carrier cap screw Rear axle shaft nut	5/8	20	110X	1820-4420
Rear axle shaft nut	1 13	58XX	T-4 X X	
Rear axle cover screw		18	210	2118-6118
Rear axle cover screw	35	024	T-5	
RUNNING BOARD				
Running board to support bolt nut	1/	16	T-5 210	1416-2116
Running board to shield bolt nut	72			
Kunning board to shield boit nut	· · · · · 1'J	14	T-5	475
SHOCK ABSORBER				
Shock absorber bracket bolt nut	34	24	110X	4424-2224
SPRINGS				
Front spring bolt nut (front)	12	34	110X	1003-3432
Front spring bolt nut (rear)	1.3-	34	110X	1003-3432
		24	110X	4424-2224
E L-14				
From spring clamp boil nut	1/2	16	T-4	1416-1316
Rear spring boit nut (iront)	118	3.5	1100.	3432
Rear spring bolt nut (rear)		34	110X	1003-3432
Rear spring clip nut	18	30	∕ 110X	2830-4330
Rear spring clamp molt nut	i/2	16	T-4	1416-1316
Front spring clamp bolt nut Rear spring bolt nut (front) Rear spring bolt nut (rear) Rear spring clip nut Rear spring clamp molt nut STARTER STARTER	/-			
Starter to cylinder screw	31	24	110X	1224-2224
STEERING GEAR	74	4-	11024	1004.0004
	4/	20	T-4	1000 4404
Steering gear case bracket to frame nut	5/8	20		1820-4424
Steering gear case plate screw	1/2	16	T-4	1316
Steering gear case lock nut	1/2	16	T-4	575-1416
Steering gear oil plug TIRE CARRIER	34	024	T-5	
TIRE CARRIER				
Tire carrier bracket to frame nut	18	18	Т-4	1618-1318
TRANSMISSION	16			1010 1010
Transmission cover screw	1/2	16	310	3116-6116
Tennemission case to motor commission case to				
Transmission case to motor screw		18	T-5	1618-6118
Transmission drain plug	31	024	T-5	
Transmission filler plug	3/4	024	T-5	
Transmission main shaft gear cover screw	1/2	16	T-5	575-475
Universal joint bolt nut	1/2	16	1000	1316
Universal joint bolt nut Universal joint bolt nut	3/4	24	T-5	2224
WHEELS (DISC)	74		A - D	2221
Demountable disc wheel nut	3/	24	500	5024
Demountable disc wheel that	74	47	300	3024

Paige "6-65"

Owners Set

No. 16 — 1/2" Hex. Socket	\$0.35
No. 18 —16" Hex. Socket	.35
No. 20 —5/8" Hex. Socket	.35
No. 22 — 18" Hex. Socket	
No. 24 —¾" Hex. Socket	
No. 28 —7/8" Hex. Socket	
No. 720 —5/8" Sq. Plug	
No. T-5—Q. D. Double End Offset	
No. T-8 - Q. D. Extension Bar	1.20
No. 500 — Dem. Rim Nut Speeder	
No. 3310—Q. D. Tee Handle	1.00
	\$6.35

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON PAIGE "6-65" CARS MODEL 1927-1928

Part Name	Size across Flats on Nuts	Combin	ations Wel	Wrenches ded and Fixed Type Sockets
Body to frame nut	5/8	020	T-2 310	520
BATTERY Battery box clamp bolt nut	}}	22	T-5 310	3122-2220
BRAKES Hydraulic brake bracket to transmission case s Hydraulic pressure case to bracket Hand brake support screw Hand brake adjusting nut Hand brake quadrant to case screw	1/2	20 16 16 24 18	T-5 T-5 T-5 110X T-5	1820-4320 575-1416 575-1618 2422-4218 575-1820
BUMPERS Bumper bracket to frame bolt Bumper bracket to frame bolt nut Bumper to bracket bolt Rear bumper bracket to frame	34	20 24 32 24	T-5 110X T-5 110X	1820-4320 2422-4218 3432 2422-4424
CLUTCH Clutch pedal adjusting clamp bolt Clutch to flywheel nuts Clutch yoke shaft lock screw	3/4	18 24 20	T-5 110 X T-5	575 2224-1224 4320-1820
FAN Fan blade to pulley screw Fan bracket to cylinder clamp screw Fan shaft nut	3/4	16 24 30	T-5 110X 110X	575-1316 4424-2422 2830-4330
FENDERS Front fender bracket to fender bolt Front fender to frame bolt nut Fender to run board bolt Rear fender to body screw Rear fender to body screw	1/2	16 16 016 18 016	T-5 310 T-5 T-5 610 T-5	575-475 3116-575 6116-575
FRONT AXLE Steering knuckle nut Steering knuckle arm nut Steering knuckle ball arm nut Drag link plug	116	34 34 30 T-1X	110 X 110 X T-5 310	1003-3432 1003-3432 2830-4330
GASOLINE TANK Gas tank support strap nuts	18 ½	19 016	T-5 T-5	1119
GENERATOR Generator to support screw	· · · · · · · · · · · · · · · · · · ·	18	T-4	2218-575
HEAD LAMP Head lamp bracket to fender nuts	12	18	T-5	575-1820 2830 575-1416

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON PAIGE "6-65" CARS MODEL 1927-1928—Continued

	Size across	Q.D.Wre	nches &	Wrenches
Part Name	Flats on Nuts	Socket	Handles	ded and Fixed Type Sockets
MOTOR Connecting rod bolt nut Cylinder head stud nut Cylinder to crank case screws Exhaust manifold to cylinder stud nut Flywheel to crank shaft bolt nut Main bearing cap screw Motor drain plug Motor support bolt nut (front) Motor support bolt nut (rear) Cylinder front cover screws Valve spring cover screw Water jacket cover screw Water outlet to cylinder screws Water nutlet to cylinder screws Water inlet connection to cylinder screw Engine mud shield to frame nut Hood sill to frame screws	5/8 5/8 5/8 5/8	20 20 16 20 24 28 720 30 24 18 16 16 16 16 16 16 16	110 X 310 T-5 610 310 310 T-5 110 X T-5 110 X T-5 110 X T-5 610 T-5 610 T-5 610 T-5 610 T-5 610	3120-2218 6116-2220 3116-6116 3120 2224-4218 2224-2830 2830-4330 2224-4218 3118-6118 575-6116 575-6116 575-6116 575-1318 575-1316
MUFFLER Muffler to support bolt	1/2 .	16 16	T-4 T-4	575-3116 575-3116
RADIATOR Radiator stud nut	34	24	310	1224-3124
REAR AXLE Rear axle housing cover screws (front and rear Rear axle housing adjusting nut clamp holt Rear axle shaft nut Rear axle drain plug Rear axle filler plug Drive shaft to sleeve coupling bolt nut Differential bearing clamp cap screw	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18 20 40 716 716 16 28	T-5 610 T-5 110 X T-5 210 T-5 210 T-5	1820-6116 1820-144 3640 575-1618 2830-4330
RUNNING BOARD Running board to support nuts Running board shield to fender nut	5/8	020 16	210 T-5	575-1816
SPRINGS Front spring shackle bolt nut Front spring shackle bolt Front spring clip nut Front spring clamp bolt nut Rear spring shackle bolt nut (front) Rear spring shackle bolt (front) Rear spring shackle bolt nut (rear) Rear spring shackle bolt (rear) Rear spring clip nuts Rear spring clamp bolt nut	18 18 11/4 11/8 18	30 24 30 18 40 36 30 24 128 18	110 X T-5 110 X T-5 110 X 110 X 110 X 110 X 110 X 110 X	2830-4330 2422-4218 2830-4330 575-1618 3640 2830-4330 2422-4218 2830-4330 575-1618
SHOCK ABSORBER Shock absorber to frame nut		24	T-5	4218-2422
- STARTER Starter to motor stud nuts	13	22	T-5	1220-2220
STEERING GEAR Steering gear arm nut Steering gear case clamp bolt Steering gear case support clamp bolt Steering gear case support clamp bolt nut Steering gear support to frame nut Steering post clamp bolt Steering post odash bracket	· · · 3/4 · · · 7/8	48 X 16 24 28 24 16 16	T-4 X T-4 T-4 110 X T-4 T-4 T-5	575-475 575-1116 2830-4330 1124-4218 475-575 475-575
TIRE CARRIER Tire carrier to frame bolt nut Tire carrier lock nut	%	18 24	T-5 500	575-1820 5024
TRANSMISSION Transmission cover screws Transmission drain plug Transmission filler plug Transmission case to flywheel housing nut Transmission shaft bearing nut Universal joint bolt nuts	3/4 3/4 1 1 ⁴ 6 5/8	18 024 022 24 34 20	310 T-5 T-5 T-5 T-5 110 X	3118-6118
WHEELS Front wheel hub bolt nuts Rear wheel hub bolt nut Demountable rim bolt nut		22 22 24	T-5 T-5 500	2220-2422 2220-2422 5024

Pontiac "Six"

Owners Set

N	In	16	_I/2"	Hex.	Socket				 		 	 	 \$0.35
A	TO.	18	—1 ⁹ 6″	Hex.	Socket						 		 .35
N	Jo.	19	32"	Hex.	Socket					 			 .35
N	lo.	20	5/8"	Hex.	Socket				 	 	 		 .35
N	lo.	22		Hex.	Socket				 	 	 	 	 .35
D	lo.	24	-3/4"	Hex.	Socket				 	 	 		 .45
N	lo.	T-5	—Q.	D. Do	uble Er	nd ()ffs	et .	 	 	 		 .75
					tension								
					n Nut S								
N	Jo.	331	0—Q.	D. Te	e Handl	е			 	 	 		 1.00
									-				\$5 85

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON PONTIAC "SIX" CARS-MODEL 1927-1928

CARS-MODEL 1927-1928									
Part Name	Size across Flats on Nuts		ches & ations Wo Handles	Wrenches elded and Fixed Type Sockets					
BODY PARTS Body to frame bolt nut	11	22	T-2 310	522-2422					
BATTERY BOX Battery box support holt nut	14	16	T-4	575-1316					
BRAKES Brake cross shaft clamp bolt nut	1/2	16 24	T-5 110X	575-1416 1224-2422					
CLUTCH Clutch to flywheel stud nut	18	18	T-5	1820-4424					
FAN Fan and water pump cap screw	1/2	16	T-4	1316-575					
FENDERS Front fender support to frame bolt Fender to running board bolts Rear fender to body screw	18	16 014 16	T-5 T-5 610	575-6116					
FRONT AXLE Steering knuckle nut Steering knuckle arm nut Drag link plug Tie rod clamp bolt nut Tie rod bolt nut King bolt nut King bolt nut King bolt nut	1 1 3/4 7/8	34 32 T-1 18 24 28 18	110X 110X 310 T-5 110X 110X	1003-3432 3432 575-2018 2422-4218 2830-4330 575-1218					
GASOLINE TANK Gas tank support bolt nut	9	18	T-5	1820-2018					
GENERATOR Generator to motor screw	1/2	19 16 16	· T-4 T-4 T-4	1119 575-1618 575-1416					
HEAD LAMP Head lamp bracket to fender bolt Head lamp stud nut		19 24	T-5 110X	1119 2422-4424					
MOTOR Connection rod stud nut Cylinder head stud nut Exhaust manifold to cylinder stud nut Exhaust manifold to exhaust pipe screw Flywheel to crank shaft bolt nut Heater to exhaust manifold screw Heater to intake manifold screw Main bearing stud nut Motor support bolt (front) Motor support bolt (rear)	58 & 3/4	18 20 18 18 18 16 16 18 (Frt20-24 28 24	T-5 310 T-5 500 T-5 T-5 T-5 T-5 T-5 T-5 110 X 110 X	3118-2216 6120-2220 3118-1216 575-2018 1216-2216 575-1316 575-1318 3120-2220 2224-2830 2424-4218					

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON PONTIAC "SIX" CARS-MODEL 1927-1928-Continued

Part Name	Size across Flats on Nuts	Q.D.Wren Combina Socket		Wrenches ded and Fixed Type Sockets
Motor drip pan nut Oil pan screw Timer clamp screw Timing gear case cover screw Water outlet manifold to cylinder screw Water pump to cylinder screw Cover stud (for adjusting valves) Heat control valve stud nut Motor drain plug		014 16 20 16 18 16 16 16 16 16	T-5 310 T-5 T-5 T-5 T-8 T-4 T-5 T-5	3116-6116 1820-2018 575-1618 1218 575-1618 575-3116 475-1416
MUFFLER Muffler support bolt Muffler bracket to frame bolt		16 18	T-4 T-4	575-1618 575-2018
RADIATOR Shell to core nut		14 22 19	T-5 110 X T-4	475-1416 2422-1220 1119
REAR AXLE Rear axle drain plug Rear axle drive pinion nut Rear axle housing cover screw Rear axle adjusting lock screw Rear axle shaft nut Universal joint coupling bolt nut	1	016 32 18 24 34 16	T-4 110 X T-5 310 110 X 110 X T-5	3432 3118-1618 4424-4218 1003-3432 475-1316
RUNNING BOARD Running board to support	176	014	T-5	T
SPRINGS Front spring shackle bolt nut Front spring clip nut Rear spring shackle holt nut Rear spring clip nut Spring rebound clip nut	7/8 3/4	28 24 28 24 16	110 X 110 X 110 X 110 X T-5	2830-4330 4218-4424 2830-4330 4218-2422 475-1316
Steering gear case cover screw Steering gear housing clamp screw Steering gear housing support cap screw Steering gear post clamp bolt Steering gear attaching cap screw	1/2	16 16 18 18 24	T-5 T-5 T-5 T-5 110X	475-1416 575-1618 575-1820 575-2018 2224-4218
TRANSMISSION Transmission cover screw (rear)	1/2	18 18 16 18	T-5 310 T-5 T-5 T-5	575-6118 1820-144 475-1316 575-2018
WHEELS (WOOD) Hub bolt nut Rim nut		. 22 24	T-5 500	2220-1220 5024

Reo "Flying Cloud"

Owners Set

No. 16 — 1/2" Hex. Socket	\$0.35
No. 18 $-\frac{9}{16}$ Hex. Socket	
No. 19 — 12" Hex. Socket	.35
No. 20 —5/8" Hex. Socket	
No. 22 — H** Hex. Socket	.35
No. 24 —¾" Hex. Socket	
No. 28 — 7/8" Hex. Socket	
No. T-4—Sliding Tee Handle	
No. T-5—Q. D. Double End Offset	
No. T-8 -Q. D. Extension Bar	.70
No. 500 —Dem. Rim Nut Speeder	1.20
No. 3310—Q. D. Tee Handle	1.00
_	

\$7.05

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON REO "FLYING CLOUD" CARS-MODEL 1927-1928

CEOUD CARS	mobile .	327-1320		
	Flats on		ations Weld	Wrenches led and Fixed
Part Name	Nuts	Socket	Handles 1	Type Sockets
BODY PARTS Body to frame bolt	18	22	T-2 310	522
BATTERY Battery box to support bolt	½	16	T-4	575-1416
BRAKES Brake lower cam adjusting nut Brake upper cam adjusting nut		31 22	T-5 T-5	2422
BUMPERS Bumper attachment bolt		24 24	T-5 500	4218-2422 5024
CLUTCH Clutch pedal clamp bolt	16	18 18	T-4 T-4	575-1820 4218-144
FAN Fan bracket stud nut	½	16	T-4	1316-57-5
FENDERS Front fender support to frame bolt	1/2	24 16 16	T-5 Γ-5 T-5	2224 575-1416 575-1416
FRONT AXLE Steering knuckle nut Steering knuckle arm nut Steering drag link plug Tie rod ball joint nut	11/8	30 34 T-1 34	110 X T-5 310 T-5	2830-4330 1003-3432 2830-4330
GASOLINE TANK Gas tank support stud nut	11	22	T-5	2422-1220
GENERATOR Generator bracket to motor stud nut	16	18	T-5	575-1218
HEAD LAMP Head lamp stud nut Head lamp tie rod bolt and nut	::: 1/2	24 16	110 X T-5	2422-4218 575-1416
MOTOR Connecting rod stud nut Cylinder head stud nut Exhaust manifold to cylinder stud nut Exhaust manifold to exhaust pipe bolt and nut Intake manifold to motor nut Main bearing stud nuts Motor support bolt and nuts Oil pan screws	94 16 58 58	20 24 18 18 18 20 31	T-5 310 110 X T-5 T-5 T-5 610 T-5 110 X 310	2220-1218 2224 575-4118 575-1820 575-4118 1820-2218

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON REO "FLYING CLOUD" CARS—MODEL 1927-1928—Continued

Part Name	Size across Flats on Nuts	Combin		Wrenches Velded and Fixed Type Sockets
Water inlet bracket to cylinder nuts	1/2	18 14 16	T-5 610 310	575-1318 1316 3116-6116
RADIATOR Radiator stud nut	34	24	T-5	1224-2224
REAR AXLE Differential carrier stud nut Rear axle cover stud nut Rear axle housing stud nut Rear axle shaft nut Rear axle drain plug Universal joint nuts (front & rear)	½ 5/81 1/6	24 16 20 46X 28 18	110 X T-5 T-5 T-4 X T-5 T-5	4424-2224 575-6116 1820-1120 2830-4330 1318-575
RUNNING BOARD Running board to support bracket nut Running board support to frame nut		19 24	T-15 310	1119 1224-2224
SPRINGS Front spring shackle bolt nut Front spring clip nut Rear spring shackle bolt nut (rear) Rear spring shackle bolt nut (front) Rear spring clip nut Rebound spring clip nut	18 1½	30 28 30 48 X 28 16	110 X 911 X 110 X T-4 X 911 X T-5	2830-4330 4330-2830 2830-4330 4330-2830 575-1416
STARTER Starter to motor stud nut	%	18	T-5	575
STEERING GEAR Steering gear support bolt		20 16	T-5 T-4	2422-1820 475-1416
TRANSMISSION Transmission cover screws Transmission filler plug Transmission drain plug	5/8	24 020 716	T-5 610 T-5 210	4218-2422
WHEELS Rim bolt nuts	3/4	24	500	5024

Star "Four" 1928

Owners Set

No. 16 — 1/2" Hex. Socket	 	. \$0.35
No. 18 — 18" Hex. Socket	 	35
No. 20 — 5/8" Hex. Socket	 	35
No. 24 —3/4" Hex. Socket	 	45
No. 28 — 1/8" Hex. Socket	 	45
No. T-5-Q. D. Double End Offset	 	75
No. T-8-Q. D. Extension Bar	 	70
No. 500 -Dem. Rim Nut Speeder		
No. 3310-O. D. Tee Handle		
~		
		@C 60

\$5.60

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON STAR "FOUR" CARS-MODEL 1928

CARS—III	ODED ISE	,		
Part Name	Size across Flats on Nuts		tions Weld	Wrenches led and Fixed Type Sockets
BODY PARTS Body to frame bolt nut	5/8	020	T-5	
BATTERY Battery box clamp bolt nut	19	19	310	1119
BRAKES Front brake adjusting screw lock nut Front cross shaft clamp bolt Front brake lever clamp bolt nut Front brake rod adjusting nut Rear brake adjusting screw lock nut Rear brake cross shaft clamp bolt Rear brake clamp lever screw	16 16 18 3/4 3/4	24 18 22 24 24 18 16	110 X 310 T-5 110 X T-5 T-5 310 T-5 T-5	2422-4218 3118-1820 2422-4330 2422-4330 2422-4218 1618-1820 575-1216
BUMPERS Front bumper to bracket screw	18 58	28 22 20 18	110 X 110 X T-5 T-5	2830-4330 4330-2220 1820-4424 575-1618 2018
CARBURETOR Carburetor to intake manifold screw	½			1316
CLUTCH Clutch pedal clamp bolt nut Clutch pedal adjusting nut Clutch adjusting finger bolt nut	16	18 18 24	110 X 110 X T-5	575-1618 575-1618 2422-4218
FAN Fan blade screw	½	16 16	T-5 110X	575-1820 575-1618
FENDERS Front fender support to frame bolt nut Front fender to run board shield nut Front fender to run board bolt nut Rear fender to body screws Rear fender to shield screws	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	18 16 018 16 16	T-5 T-5 T-5 T-5 T-4	575-1820 575-1618 575-1214 575-1618
FRONT AXLE Steering knuckle spindle nut Steering knuckle arm nut Steering tie rod ball stud nut Steering tie rod adjusting clamp bolt Steering tie rod drag link plug	16	30 30 30 18 T-1	110 X 110 X 110 X T-5 T-5	2830-4330 2830-4330 2830-4330 575-1618
GASOLINE TANK Gas tank support bolt nut	½	16	T-5 610	6116-1216
GENERATOR Generator to motor adjusting bolt nut	5/8	20	T-5	1218

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON STAR "FOUR" CARS—MODEL 1928—Continued

	Size across Flats on	Q.D.Wrei	nches &	Wrenches
Part Name	Nuts		Handles	Type Sockets
HEAD LAMP				
Head lamp stud nut	7/8	28 020	T-5 110X	575-1316 575-1316
MOTOR Cylinder head stud nut	5/a	20	310 T-5	3120-2218
Cylinder head stud nut Exhaust manifold to cylinder stud nut		18	310 T-5 310 T-5	3118-1218
Intake manifold to cylinder stud nut	11/8	18 36	T-5	3118-1218 3640
Motor support screw (front)	1/6	18 18	T-5 T-5	575-1218 575-1218
Motor drain plug Motor support screw (front) Motor support screw (rear) Water pump housing to cylinder holt and nut	1/2	16	T-5	575-1618
Valve cover screws	16	14 20	310 T-5	3114-1214 1218-1820
Oil filler bracket to cylinder screws		14	T-5	475-1416
MUFFLER	*/	16	T-5	575-1416
Muffler support bolt nut Muffler to pipe bolt nut	1/2	16	T-5	575-1416
Muffler tail pipe support bolt nut	· · · · · 1/2	16	Т-5	575-1416
RADIATOR Radiator stud nut	} }	22	310	3122-1220
REAR AXLE	10			
Rear axle shaft nut	1 1 8	34	110X	3432 575-1820
Rear axle housing bolt nut	W 5/8	18 20	110X T-5	1820-4218
Rear axle drain plug		014 026	T-5 T-5	
	16	020	1 •3	
RUNNING BOARD Running board to support bolt nut (front)	16	018	T-5	
Running board to support bolt nut (rear)	· · · · · · · · · · · · · · · · · · ·	018	T-5	
SPRINGS Front spring bolt and put (front)	7/6	28	110X	2830-4330
Front spring bolt and nut (front) Front spring bolt clamp nut (rear)	16	18	T-5	575-1820
Front spring clip nut	3/8	20 16	T-5 T-4	1820-4424 1416-1618
Rear spring bolt and nut (front)	7/8	28	110X	2830-4330
Rear spring bolt clamp nut (rear)	16	18 24	T-5 T-5	575-1618 2422-4218
Rear spring clamp bolt nut	1/2	16	T-4	575-1618
STARTER Starter clamp bolt nut		18	T-5	575-1618
STEERING GEAR				
Steering gear case clamp screw	1/2	16	T.5	4424-1618
Steering gear post adjusting nut	1.1.4	32 34	110 X 110 X	3432 3432
Steering gear lever nut	5/8	20	110X	1820-4424
Steering gear support bracket to hous, bolt	nut 3/8	20		2018
TRANSMISSION Transmission cover screws	1/2	16	310	1216-6116
Transmission drain plug	5/9	020 020	T-5 T-5	
Transmission filler plug	78	14	T-4	1416-475
	(fr.) 16			2018
TIRE CARRIER Tire carrier lock nut	3/4	24	500	5024
WHEELS (WOOD)	. , , ,			
Demountable rim bolt nut	34	24	500	5024
Hub bolt nuts (front and rear)	tå	22	310	3122-2220

Studebaker "Commander Victoria Six"

Owners Set

No. 16	—¹/2"	Hex.	Socket				 		 	 		\$0.35
No. 18	-16"	Hex.	Socket				 		 	 		.35
No. 20			Socket									.35
No. 22	-16"	Hex.	Socket				 		 	 		
			Socket									
No. 26												.45
No. 28	<i>─</i> ½″	Hex.	Socket				 	٠.	 	 		.45
No. T-4	-Slid	ing To	ee Hand	ile .			 		 	 		.75
No. T-S	$5 - \mathbf{Q}$.	D. Do	uble En	q O	Hse	t.	 		 	 	•	./5
No. T-1	.0Q.	D. Ex	ctension	, Ba	r		 ٠.		 	 		1.20
No. 500	—Der	n. Kin	n Nut S	pee	der	٠.	 	٠.	 	 	٠	1.20
No. 331	0—Q. J	D. Tee	Handl	е		٠.	 		 	 		1.00

\$7.20

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON STUDEBAKER
"COMMANDER VICTORIA SIX" CARS—MODEL 1927-1928

"COMMANDER VICTORIA SIX"	CARS-		1927-1928	117
		Q.D. Wrenc		Wrenches ed and Fixed
	lats on Nuts - S			Type Sockets
Part Name BODY	Auts .	JOCKEL .	Handies 1	. y pe Sockets
Body to frame bolt nut	7.6	28	T-5 T-2 310	4330-528
Body to frame bolt nut (rear)		028	T-5	
BATTERY	/ 0	0-0		
Battery box support bolt nut	9	18	T-5 310	3118-575
BUMPERS	14			
Front bumper bracket to frame bolt nut	1 18	34	110X	3432-1003
Front bumper to bracket screw		30	110X	2830-4330
Rear bumper bracket to frame bolt nut	110	34	110X	3432-1003
BRAKES			m .	ene (ne
Front brake lever clamp adjusting bolt		16	T-4	575-475
Front brake shaft ball stud nut		20	1-5	1820-4320 4424-4218
Front brake bracket to axle bolt		24 28	T-5 T-8 T-5	1224
Rear brake adjusting nut		012	110X	
Rear brake support screw	78 1/.	16	T-5	575-2216
Brake cross shaft bracket bolt	0_	18	T-5	575-2216
Brake cross shaft lever clamp bolt		16	T-5	575-1216
COIL	/ 4			
Coil bracket screw	1/,	16	T-5	4116-575
CLUTCH	-			
Clutch pedal adjusting nut	3/8	28	T-5	4330-2224
Clutch pedal to shaft adjusting nut	5/8	20	T-4	1220-2120
FAN				
Fan shaft clamp bolt nut	16	18	310	3118-1218
FENDERS	- /		CD r	F7F 4404
Front fender support to frame bolt	1/2	16	T-5 T-5	575-4424 575-1416
Front fender to run board shield nuts		16 018	T-5	
Front fender to run board shild nuts		018	210	
Front fender to run board bolt nut		16	T-5	575-1214
Rear fender to shield screw		16	T-5	6116-575
Rear fender to gas tank shield bolt nut	1/2	16	T-5	6116-575
FRONT AXLE	/ 2	10		
Steering knuckle spindle nut	11/2	48X	T-4X	
Steering knuckle ball arm nut (front)	2/8	28	110X	4330-2830
Steering knuckle ball arm nut (rear)	7/8	28	110X	4330-2830
Steering tie rod clevis bolt nut	16	18	T-4	575-1618
Steering tie rod ball stud nut	7/8	28	110X	4330-2830
Drag link plug	1 1/8	T-1	T-5 310	
GASOLINE TANK	41	24	T-5	2224-4424
Gas tank support bolt nut	24	014	T-4 210	
Gas tank drain plug	78	014	1.4 210	
Head lamp stud nut	13	26	T-5	1126
Head lamp bracket to fender bolt nut	16	18	T-5 210	575-2118
MOTOR	1.6			
Cam shaft nut	34	28	110X	2224-4330
Connecting rod cap bolt nut		24	310	3124-1224
Cylinder head screw	34	24	Ť-5	6124-2422
Cylinder to case screw	3/4	24	T-5	4424

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON STUDEBAKER "COMMANDER VICTORIA SIX" CARS—MODEL 1927-1928—Continued

	Size across Flats on	Q.D.Wres	nches &	Wrenches elded and Fixed
Part Name	Nuts	Socket	Handles	Type Sockets
Exhaust manifold to cylinder stud nut	%	18	T-5 210 T-5 210	575-4118
Intake manifold to cylinder stud nut Exhaust manifold to exhaust pipe holt nut Exhaust manifold to exhaust pipe bolt nut (rea	1/2	18 16	T-4	575-4118 575-475
Exhaust manifold to exhaust pipe bolt nut (rea	r) ½	20	1316	1316
Flywheel to crank shaft holt nut	· · · · 5/8	20 18	T-5 T-5	1218-2216 575-1118
Motor support poit nut (front)	3/4	24	110X	1224-2224
Motor support holt nut (rear) Oil drain plate screw		24 18	110X T-4 210	1224-2224 575-2118
Oil drain plate screw Oil pan to cylinder screw (Suggest 8½" Spdr. Oil filler tube flange to case screw) ++ 11	18	310	3118-4118 1318
On pump screw		18 32	T-5	3432
Water outlet to cylinder screw	· · · · · · · · · · · · · · · · · · ·	18	310	3118-575 3118-6118
MUFFLER		18	310	
Muffler to bracket holt nut	· · · · · · · · · · · · · · · · · · ·	18	T-4	575-1618
Radiator stud nut	3/4	24	310	1224-3124
Differential carrier front housing screw		18	T-5	575-4118
Differential carrier cap stud nut	7/8	28	T-5	2224-2830
Differential carrier clamp bolt nut Differential pinion bearing lock nut	3/8 8/4	20 -20	T-5 T-5	144-4424 144-4424
Differential shaft nut	1 3/8	44 X	T-4X	575-3116
Differential pinion bearing lock nut Differential shaft nut Differential rear plate screw Rear axle filler plug Rear axle shaft nut	3/4	16 024	310 610 210	5/5-3116
Rear axle shaft nut	134	56 X X	T-4XX 1316	1316
Universal joint nut RUNNING BOARD	1/2	16	1310	1316
Running board to support screw SHOCK ABSORBERS	16	018	210	
Shock absorber to bracket nut	3/4	24 34	110 X 110 X	1124-4424 1003-3432
Shock absorber to axle bolt nut Shock absorber bracket to frame nut Shock absorber strap to bracket nut	16	20	T-5	144-2120
Shock absorber strap to bracket nut SPRINGS	1/2	16	T-4	575-1416
Front spring bolt nut (front)	116	34	110X	1003-3432
Front spring bolt nut (front) Front spring bolt nut (rear) Front spring bolt nut (rear)	116	34 19	110X T-4	3432 1119
Rear spring bolt nut (front)	11/4			3640
Rear spring clip nut	1 1'6	34 32	110X 110X	1003-3432 3432
Front spring clamp bolt nut Rear spring bolt nut (front) Rear spring bolt nut (rear) Rear spring climp bolt nut Rear spring clamp bolt nut	19	14	T-4	1119
STARTER Starter drive chain adjusting screw	3/4	24	T-5	2224-4224
Starter to gear housing set screw	· · · · 35	012 16	210 1316	1316
STEERING GEAR				
Steering gear arm nut	116	34 18	110X T-5	1003-3640 575-1618
Steering gear case to post clamp screw		18	T-5	575-1618
Steering gear adjusting screw	111 11	18 22	T-4 T-4	1820-4424 2422-4330
Steering gear case bracket adjusting screw	16		1318	1318
Steering gear case bracket adjusting screw Steering gear case bracket clamp bolt nut Steering gear bracket to frame bolt	3/4	24 18	T-5 T-10 9	711X 1224 575-1820
TIRE CARRIER		2.4	Tr. r	
Tire carrier to frame stud nut	116	34 18	T-5 T-5	1003-3432 575-1618
TRANSMISSION		16	310	3116-6116
Transmission to motor screw	76	18	T-5	1618-6118
Transmission main shaft bearing cover screw.	11	48X	T-4 X	1318
Transmission to motor screw Transmission main shaft bearing cover screw Transmission main shaft nut Transmission drain plug	3/8	712	210	
Transmission filler plug	13	026	T-4 310	1316
Transmission brake adjusting nut	1/8	28	210	1224-2124
Transmission brake support screw Transm. brake band guide pulley to frame bolt	3/8	012 18	T-4 T-4	575-1618
WHEELS (WOOD)				
WHEELS (WOOD) Hub bolt nut Demountable rim bolt nut WHEELS (DISC) Disc wheel demountable hub nut	18	22 20	Γ-5 310 500	1220-3122 5020
WHEELS (DISC)	2/			
Disc wheel demountable hub nut	• • • 4	24	500	5024

Studebaker "Dictator Standard Six"

Owners Set

No. 16 —1/2" Hex. Socket	\$0.35
No. 18 — Pa" Hex. Socket	
No. 19 — 18" Hex. Socket	
No. 20 —5/8" Hex. Socket	35
No. 22 — ld" Hex. Socket	
No. 24 —¾" Hex. Socket	45
No. 28 — 7/8" Hex. Socket	.45
No. T-4—Sliding Tee Handle	75
No. T-10—Extension Bar	
No. 500 —Dem. Rim Nut Speeder	
No. 3310—Q. D. Tee Handle	1.00

\$6.35

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON STUDEBAKER "DICTATOR STANDARD SIX" CARS—MODEL 1927-1928

"DICTATOR STANDARD SIX" CA	ARS-MODEL 192	27-1928
	cross O.D.Wrenche s on Combination	es & Wrenches ons Welded and Fixed
Part Name Nu		andles Type Sockets
BODY		
Body to frame bolt nut	8 28 T	-2 310 4330-2224
BATTERY		
Battery box support bolt nut f	18 T	-5 310 575-3118
BUMPERS		
Front bumper bracket to frame bolt nut		10X 1003-3432
Front bumper to bracket screw	§ 30 T	-5 2830-4330
Rear bumper bracket to frame bolt nut	σ 34 1:	10X 1003-3432
BRAKES		
Front brake lever clamp adjusting bolt	4 1" =	-4 575-1416
Front brake lever shaft ball stud nut 5	0	'-5 1820-4424 10X 4218-4424
Front brake bracket to axle bolt		10X T-10 2830-4330
Rear brake adjusting nut		10X
Brake cross shaft bracket bolt		-5 575-2216
Brake cross shaft to frame bolt		-5 575-2216
Brake cross shaft lever clamp bolt//		-5 575-1216
CARBURETOR		
Carburetor to manifold screw	16 13	316
COIL		
Coil to bracket	16 T	-5 575-4116
CLUTCH		
Clutch pedal adjusting nut	á 28 1:	10X 2224-4330
FAN Fan shaft clamp bolt nut	18 T	-5 575-1318
	5 10 1	373 1316
FENDERS Front fender support to frame bolt	4 16 1	10X 575-4424
Front fender to frame bolt	-	575-1416
Front fender to running board shield nut		-5 575-1618
Front fender to running board holt nut	018 2	10
Rear fender to body screw	4 16 <u>T</u>	-5 575-1416
Rear fender to shield screw	$\frac{1}{2}$ 16 $\frac{1}{2}$	-5 610 575-6116
Rear fender to gas tank shield holt nut	½ 16 T	7-5 610 575-6116
FRONT AXLE	4 / 37 / 77	437
Steering knuckle spindle nut	6	-4X -4 2830-4330
Steering knuckle arm ball nut	0	'-4 2030-4330 '-4 575-1118
Steering tie rod bell stud nut	9	2831-4330
Drag link plug (front and rear)		-5
Steering tie rod drag link plug		-5
CASOLINE TANK		
GASOLINE TANK Gas tank support bolt nut	4 24 T	-4 2224-4424
Gas tank drain plug	1 014 T	-4 210
GENERATOR Generator to motor screw) 10 T	-5 575-1218
Generator to motor screw	₆ 18 T	-3 3/3-1218
HEAD LAMP		
Head lamp stud nut		0X 3432
Head lamp bracket to fender bolt nut f	_g 18 T-	5 210 575-2118

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON STUDEBAKER "DICTATOR STANDARD SIX" CARS—MODEL 1927-1928—Continued

		Q.D.Wren	ches &	Wrenches
Part Name	Flats on		ations Weld Handles T	ed and Fixed Type Sockets
Part Name MOTOR Cam shaft nut	Auts			
Cam shaft nut	34	24 18	110X 310	2224-4218 1218-575
Cylinder head screw	TE 34	24	T-5	6124-2224
Exhaust manifold to cylinder stud nut	16	18	T-5 310 500	575-6124
Intake manifold cylinder stud nut	1g	18 20	T-5 310 500 T-5	575-6124 1218-2218
Heater to intake manifold holt nut	98	18	T-5 210	1218-2118
Motor support bolt (front)	16	18	310	3118-1218
Motor support bolt (rear)	34	24 16	T-5 210	1224-2224 575-2116
Oil pan to cylinder screw (16" Sp. can be used	1) 1/2	16	310	3116-4116
Oil pump screw	1	32	T-5	3432
Water outlet to cylinder screw	16	18 16	T-5 T-5	575-6118 575-1416
Water cover plate screw	%	18	310	3118
Water pump housing to cylinder screw	19	18 20	1318 T-5 310	1318 3120-1218
Heater to intake manifold bolt nut Motor support bolt (front) Motor support bolt (front) Oil drain plate screw Oil pan to cylinder screw (16" Sp. can be used Oil pump screw Timing gear cover screw Water outlet to cylinder screw Water cover plate screw Water pump housing to cylinder screw Main bearing cap screw MUFFLER	98	20	1-3 310	3120-1210
Muffler to bracket bolt nut		18	T-4	575-1118
RADIATOR				
Radiator stud nut	34	24	T-10 310	1224-3124
REAR AXLE Differential carrier front housing screw	,p	18	T-5	575-4118
Differential carrier rear plate screw	16 1/2	16	310 610	3116-6116
Differential carrier cap stud nut	7/8	28	T-5	2224-2830
Differential pinion bearing lock nut	5/6	20 20	T-5 T-5	144-4424 144-4424
Differential pinion shaft nut	196	44 X	T-4X	
Rear axle filler plug	1 3 4	024 44 X	210 T-4X	
Differential carrier roar plate screw Differential carrier cap stud nut Differential carrier cap stud nut Differential pinion bearing lock nut Differential pinion shaft nut Rear axle filler plug Rear axle shaft nut Universal joint bolt nut	1/2	44.7	1.47	1316
RUNNING BOARD				
Running board to support screw	16	018	210	
SHOCK ABSORBERS Shock absorber bracket bolt nut	3.4	24	T-4	4218-4424
Shock absorber bracket to frame bolt nut Shock absorber strap to bracket nut	34	20	T-5	144-2220
	56	20	T-5	1820-2220
FRONT SPRINGS	1.1	34	110X	1003-3432
Front spring bolt nut (rear)	1 16	34	110X	3432
Front spring clamp bolt nut	10	19	T-4	1119
Rear spring bolt nut (tront)	1.5.	3.4	T-5	3640 1003-3432
Front spring bolt nut (front) Front spring bolt nut (rear) Front spring clamp bolt nut Rear spring bolt nut (front) Rear spring bolt nut (rear) Rear spring clip nut Pear spring clip nut Rear spring clip nut	1	32	T-5	3432
Rear spring clamp bolt nut	18	19	T-4	1119
Starter to cylinder screw	&	18	T 45	575-1618
Starter to cylinder screw STEERING GEAR Steering gear arm nut Steering gear post clamp bolt nut Steering gear case to post clamp screw Steering gear adjusting screw Steering gear adjusting lock nut				
Steering gear arm nut	1 1/6	38 X 18	T-4X T-5	575-1618
Steering gear case to post clamp screw	16	18	T-5	575-1618
Steering gear adjusting screw	18	18	T-4	1820-4424
Steering gear adjusting lock nut	18	22	T-4	2422-4330 1318
Steering gear case to bracket adjusting screw Steering gear case bracket to clamp bolt nut	34	24	T-5 T-10	1224
TIRE CARRIER			F49. #	1002 2122
Tire carrier to frame stud nut	I _{fg}	34 18	T-5 T-5	1003-3432 4116-575
TRANSMISSION	16	*0		
Transmission cover screw	1/2	16	310	3116-6116
Transmission to motor screw	112	18 48 X	T-5 T-4 X	1318-6118
Transmission drain plug	7/8	028	T-4 310	
Transmission drain plug Transmission brake drum to universal bolt	1/2	24	210	1316
Transmission adjusting nut	/8	012	T-4	2124-1224
Transmission adjusting nut Transmission support screw Trans. tightening guide pulley to frame nut Transmission filler plug	···· To	18	T-4	575-1618
Transmission filler plug	7/8	028	T-4 310	
WHEELS (WOOD)		22	T-5 310	1220-3122
Hub bolt nut Demountable rim bolt nut (wood or disc)	5/8	20	500	5020

Willys Knight Owners Set

No. 16 —1/2" Hex. Socket\$0	.35
No. 18 — 16" Hex. Socket	.35
140. 19 32 Treat December 111111111111111111111111111111111111	.35
110. 20	.35
THE TICKLE COUNTY THE TENT OF	35
110. 21 /4 110.11 000.100 1101.111.111.111.111.111	.45
110, 20 32 11011 5001101 111111111111111111111111	.45
Tion 20 ym Item Doctor IIIIIIII	.40
210. 720 10 04. 2108 11.11.11.11.11.11.11.11.11.11	.75
	.70
	.20
No. 3310—Q. D. Tee Handle 1	.00

\$7.15

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON WILLYS-KNIGHT 70A CARS-MODEL 1927

CARS—MC	JDEL 1927			
Part Name	Size across Flats on Nuts		ations We	Wrenches Ided and Fixed Type Sockets
BODY PARTS Body to frame bolt nut		22	T-2 310	522-1122
BATTERY				
Battery box clamp bolt nut Battery box bracket to frame nut	10	16 18	T-5 210 T-5	575-1820 1820-575
BRAKES Brake band adjusting nut Brake band support screw Brake cross shaft bracket to frame bolt Brake shaft lever clamp nut Rear brake shaft bracket to rear axle hous. screw Hand brake lever ratchet screw Hand brake lever adjusting screw Hall equalizer pull rod adjusting clamp nut Brake shoe adjusting nut	16 ½2 w 16	24 18 18 16 18 18 16 22 18	T-5 210 T-5 T-5 T-5 T-4 T-5 T-5 T-5	4218-2422 575-1618 575-1318 475-1316 575-1618 1318-575 575-1820 2422 1820-1618
BUMPERS Bracket to frame bolt nut		20 32	T-5 -T-4	1820-4424 3432
CLUTCH Clutch adjusting bolt	5/8	20	T-5	1820-4320
FAN Fan adjusting bolt Fan bracket to cylinder bolt		14 14	T-5 T-4	475-1416 475-1416
FENDERS Front fender bracket to frame bolt Front fender to frame bolt Fender to running board apron bolt Rear fender to body screws Front fender to running board bolt Rear fender to running board bolt	· · · · 1/2 · · · · · 1/2 · · · · · 1/2 · · · · · 1/2	16 16 16 16 014 014	110 X T-5 210 T-5 T-5 T-5 T-5	575-1416 575-1618 575-1416 575-616
FRONT AXLE Steering knuckle nut Steering knuckle arm nut Steering knuckle arm ball nut Steering tie rod clevis clamp bolt nut Steering drag link plug	118	44X 34 24 18 T-1	T-4X T-5 T-5 T-5 310	1003-3432 4424-4218 575-1820
GASOLINE TANK Gas tank drain plug	3/8	012	Т-5 210	
GENERATOR Generator support bolt	16	18	T-5	1218-1118
HEAD LAMP Head lamp bracket to fender bolt Head lamp stud nut Heal lamp tie rod bolt	33	16 25 16	T-5 911X T-5	575-1416 1125 575-1416

BLACKHAWK WRENCH SPECIFICATIONS FOR WORK ON WILLYS-KNIGHT 70A CARS-MODEL 1927—Continued

Part Name	Size across Flats on Nuts		iches & ations Wel Handles	Wrenches ded and Fixed Type Sockets
MOTOR Cam shaft nut Connecting rod stud nut Connecting rod screw wrist pin end Coil bracket screw Cylinder head screw Engine support bolt (front) Engine support bolt (rear) Engine shield screws Exhaust manifold to motor stud nut Exhaust pipe to manifold screws Flywheel to crank shaft bolt Flywheel guard to case stud nut Main bearing stud nut Crank case to cylinder bolt Crank case oil drain plug Timing gear cover screw Timer to generator screws Water inlet to cylinder screws Water outlet to cylinder screws	16 14 14 14 14 14 14 14 14 14 14 14 14 14	18 18 16 14 18 24 24 16 18 18 18 16 24 16 36 18 19 19	110 X T-5 310 310 T-5 T-5 110 X 911 X T-5 610 T-5 110 N T-5 110 X T-5 T-5 510 T-5 T-5 310 T-5 T-5 510 T-5 T-5	1820-4218 1216-3118 1118-1214 475 2218-1216 2224-1224 575-475 6116-3118 575-1318 2218-4218 3116-6116 3640 1820-6118 1119 575-1318 575-1318
MUFFLER Muffler bracket bolt	16	18	T-5	3118-575
Radiator stud nut	3/4	24	T-5	2224-4218
REAR AXLE Differential housing bearing cap stud nut Rear axle housing cover screws Rear axle pinion nut Rear axle shaft nut Rear axle pinion lock screw Rear axle filler plug Rear axle rubber bumper screw Rear axle drain plug Propeller shaft coupling nut	11/2	24 18 40 48X 20 030 14 710	T-5 T-5 T-5 T-4X T-5 T-5 T-5 T-5	2422-4218 3118-6118 3640 2220 475-1416
RUNNING BOARD Running board to support bolt nut		014	T-5	
SPRINGS Front spring cushion bolts and nuts Front spring shackle bolt nut (rear) Front spring clip nuts Rear spring shackle bolt nut (front) Rear spring shackle bolt nut (rear) Rear spring clip nut Spring rebound clamp nut	3/4 3/4 3/4	20 24 24 24 24 24 28 16	T-5 T-5 T-5 T-5 T-5 T-5	1820-4424 2422-4218 2422-4218 2422-4218 2422-4218 2830-4330 575-1316
STARTER Starter motor lock screw	3/4	24	T-4	2224
STEERING GEAR Steering gear lock nut bolt	16	20 16 24 18	T-5 110 X T-5	1820-4424 2224-1224 575-1820
TRANSMISSION Transmission case to motor screws Transmission drain plug Transmission filler plug Transmission rear bearing cover screw		16 16 016 030 18	911X 310 T-5 T-5 T-5	575-1416 3116-6116 575-1820
TIRE CARRIER Tire carrier bracket to frame nut Tire carrier spider to bracket nut	5/8	20 18	T-5 T-4	1820-2220 575-1820
WHEELS Rear wheel hub nut	11	22 24	T-5 500	1220 5024



